Macalester College 1997–1998 Catalog

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1997-1998 Calendar

Fall Semester 1997

Sept. 3–6/Wed.–Sat. New Student Orientation Sept. 8/Mon. Upperclass Validation Sept. 8/Mon. Beginning of Classes

Sept. 8/Mon. Incompletes Due from Spring, Summer 1997

Sept. 19/Fri. Last Day to Register or Validate
Sept. 26/Fri. Last Day to Add a Class, Drop a Class

(No Notation), and Designate Grading Options

Oct. 23–26/Thurs.—Sun. Fall Mid-Term Break Nov. 7/Fri. Last Day to Withdraw

Nov. 17-Dec. 5/Mon.-Fri. Spring 1998 Class Registration

Nov. 27–30/Thurs. – Sun. Thanksgiving Recess

Dec. 12/Fri. Classes End

Dec. 12/Fri. January Independent/Internship Registrations

Due

Dec. 15/Mon. Study Day

Dec. 16–19/Tues.-Fri. Final Examinations

Spring Semester 1998

Jan. 26/Mon. Validation of Registration Jan. 26/Mon. Beginning of Classes

Jan. 26/Mon. Incompletes Due from Fall 1997
Feb. 6/Fri. Last Day to Register or Validate
Feb. 13/Fri. Last Day to Add a Class, Drop a Class
(No Notation), and Designate

Grading Options

Mar. 21–29/Sat. – Sun. Spring Mid-Term Break

Apr. 3/Fri.
Last Day to Withdraw from a Class
Apr. 10/Fri.
Good Friday (Classes Cancelled)
Apr. 20-May 1/Mon.-Fri.
Fall 1998 Class Registration

May 5/Tues. Classes End May 6/Wed. Study Day

May 7–12/Thurs.—Tues. Final Examinations
May 16/Sat. Baccalaureate
May 17/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, 1997. 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, History and Religious Affiliation

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 from the Faculty

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 in the 1940s, flourishes today through the presence of international students and faculty, the incorporation of world 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 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 in March 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, 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 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 developed the College's focus on internationalism—another significant part of Macalester's make-up today—through programs for foreign students, 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 the College's major benefactors, 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, and still stands as one of the finest facilities of its kind for a small college 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 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; involvement with a diversity of people; involvement in international issues; involvement in the life of the metropolitan area; and involvement in service.

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

Unprecedented Strength. The 1990s have been another turning point in Macalester's history. In 1991, the College's endowment became one of the largest among liberal arts colleges in the U.S., promising a financial stability that enables Macalester to pursue its high ideals with renewed vision.

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 uncompromised academic quality—an education which is characterized by international and multicultural perspectives and which seeks application to a life of service.

The College is currently in the process of adding a significant number of faculty positions while holding steady the size of the student body. This step is enabling the College to deepen the curriculum, enhance an already strong emphasis on faculty-student collaborative research and writing, and further diversify the perspectives represented in Macalester's educational program. The College is also increasing international study opportunities for both students

and faculty, and strengthening co-curricular programs from athletics to residential life to community service.

The College's DeWitt Wallace Library, opened in September 1988, symbolizes both the academic and financial vigor of the College and a commitment to its finest traditions. The library was the first step in a comprehensive campus improvement program that involves renovating virtually every academic and residential building on campus as well as the athletic facilities, and building a new campus center.

These initiatives 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. Led by President Michael S. McPherson, Macalester College continues to seek the best possible ways to carry out its abiding commitments to academic excellence, to the education of capable students from the widest range of social and cultural backgrounds, and to an education that fits young people for a life of service in an increasingly interdependent 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. 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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Mark F. Lindsay '85, General Counsel to the Office of Administration, The White House, Washington, D.C.

Michael S. McPherson, (ex officio), *President, Macalester College, St. Paul, Minnesota*

Joan Adams Mondale '52, Potter and Arts Advocate, Minneapolis, Minnesota

Janet Rajala Nelson '72, President, St. Paul Custom Markets, The St. Paul Companies, Inc., St. Paul, Minnesota

Ford J. Nicholson '78, President, Draft Co., St. Paul, Minnesota

David A. Ranheim '64, Partner, Dorsey & Whitney, Minneapolis, Minnesota

John C. Robinson '71, President, Group Robinson, Menlo Park, California

Ann M. Samuelson '85, Account Executive, Campbell Mithun Esty, Minneapolis, Minnesota

Bruce L. Soltis '66, President and CEO, Arrow-Sysco, New Orleans, Louisiana

Gordon C. Stewart, Senior Minister, Westminster Presbyterian Church, Minneapolis, Minnesota

Ruth Stricker-Dayton '57, Executive Director/Owner, The Marsh, Minnetonka, Minnesota

Mark A. Vander Ploeg '74, Managing Director, Merrill Lynch & Co., San Francisco, California

Mary W. Vaughan, Community Volunteer, Minneapolis, Minnesota

F. T. Weyerhaeuser, Chairman of the Board (Ret.), Clearwater Management Company, St. Paul, Minnesota

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

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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 and class rank must be a 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 70 other countries (81 countries if dual citizens and permanent residents are included) in 1996–97, 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 Freshmen

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. 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 freshmen planning to enroll for the fall semester. 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.

Admissions Policies

| First Year Students | Application | Decision | Candidate's |
|--------------------------------|-------------|-----------------|---------------|
| | Deadline | From Macalester | Reply Date |
| 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 in mid-December one of three responses from the Admissions Office: 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 in early February one of the three admissions responses: 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 at the point 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 in any event before March 1.

For all Macalester admission plans, candidates are urged to submit their applications before the deadline to insure the most careful consideration by the Admissions Office. Students whose credentials are not received by January 15 will be considered 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. Freshmen 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 1998–1999 should submit 1997 financial information.)

Early Admission: A few students who have not yet graduated from secondary school are admitted to Macalester at the end of their junior year. Among the major 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 freshman 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, a number of students who have been offered admission to Macalester request the deferral of their admission. Deferrals are granted, at the discretion of the Admissions Committee, for the period of one academic year. There are no one-semester deferrals. Deferrals may be granted for a variety of reasons, most commonly to allow a student to spend a year overseas. Candidates should be aware, however, that Macalester will not accept credit for

Admissions Policies

academic work completed during the deferral period. Questions about the deferral process should be directed to the Admissions Office at $(800)\ 231-7974$ or $(612)\ 696-6357$.

Methods of Application for Transfer Students

A transfer student is anyone who wishes to receive credit towards graduation for more than the equivalent of twenty Macalester credit hours or who has been enrolled in a college or university as a full-time or 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 not official, but is usually accurate 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 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. Arrangements to take the TOEFL test should be made well in advance through the student's school, the nearest U.S. Consulate 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.

Admissions Policies

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 two weeks in advance of the intended visit. Appointments can be made for tours and interviews by phoning the Admissions Office at 612-696-6357 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.

Prospective students may wish to spend a day and night on campus. Arrangements to visit classes and 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 (612) 696-6357 or (800) 231-7974.

Tuition, Fees, and Room and Board 1997-1998

The tuition rate for full time students (12-18 hours per semester) for 1997-1998 is \$18,630 per year.

Fees

| Application Fee | \$40 |
|--|------|
| Enrollment Deposit (applied to first semester tuition charges) | 300 |
| Late Registration Fee | 100 |
| Late Validation Fee | 35 |
| Late Payment | 40 |
| Student Activity Fee | 128 |
| 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) | 18,630 |
|--|--------|
| Part-time, less than 12 hours per semester (per semester hour) | 515 |
| Hours in excess of 18 (per semester hour to a maximum of 20) | 1,030 |

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.

Students with an anticipated graduation date of 1998 will be permitted to take a credit overload of 19 or 20 semester hours either the first or second semester of 1997-98 with no extra charge. Students with an anticipated graduation date of 1999 will be permitted the same opportunity during the 1997-98 and 1998-99 academic years. It should be noted, however, that extra credits will not be required since there has been a reduction in the hours required for the graduating classes of 1998 and 1999.

Special

| Adult Scholar, up to 10 hours per semester (per semester hour) | | |
|--|--|--|
| Macalester Graduate, maximum of 5 hours per semester | | |
| (Graduates and Adult Scholars taking more than the stated credit limit are | | |
| billed the regular part-time or full-time tuition rate for all credits.) | | |
| Credit by Examination | | |
| Summer Independent Study (Summer 1998, per semester hour) 515 | | |
| January Independent Study (maximum of 2 hours) no charge | | |
| Music Lessons | | |

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 | 5,430 |
|-----------------------------|-------|
| (Room—2,820) | |
| (Board—2,610) | |
| Language Houses (room only) | 3,020 |

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 a leave of absence or 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 notice of leave of absence or withdrawal from the College from the Dean of Student's Office.

No additional charge is made for January independent study. No refund is made for students who do not register for credit in January.

The student activity fee is non-refundable.

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

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

Payment of Student Accounts

Students are billed for the fall semester in mid-July, with charges due and payable on or before August 15. Students are billed for the spring semester on December 15, with charges due and payable on or before January 12.

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 may make special 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.

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 apply for financial aid from Macalester and other sources.

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. First, to be considered for financial aid, a student must 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, computations made by the processing services, and determines the student's financial need. Fourth, 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 admission and financial aid applications by January 15.

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 fraternal organizations. All students seeking financial aid are required to file a FAFSA and Profile application. 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 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 so students and their families may complete them before May 1. Renewed aid is awarded in late May or early June. Students with work study contracts may obtain their jobs at an annual Job Fair held in early May. Macalester financial aid officers are available for consultation throughout the year and encourage students to make appointments to discuss their financial concerns.

How to Apply for Financial Aid

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

- 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 in the office of your school principal or counselor. If necessary, aid applications may be obtained from the Macalester Financial Aid Office.
- 3. Apply for a Pell Grant by completing the FAFSA so that you will be considered for this type of federal assistance.
- 4. All students receiving financial aid from the College will be expected to submit their parents' and their own federal tax return to support the financial information on the FAFSA and Financial Aid Profile. Parents are also required to submit a photocopy of all their W-2 forms.

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 scholarship, work, and loan funds. Awards range from \$200 to the full cost of attendance. The amount of each type of aid varies according to College funds,

the student's financial need, and College aid policies. During 1996–97, more than 70 percent of Macalester's 1,700 full time students received financial assistance amounting to \$17 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 and transfer students as well as upperclass students who have financial need. Students need not apply for specific scholarships since they will automatically receive consideration for all funds for which they may be eligible.

Endowed Scholarships. A large number of endowed scholarships are available as a result of generous gifts from friends and alumni of the College. Endowed scholarships are an integral part of the Macalester Grant program and contribute significantly to the policy of the College meeting full demonstrated need. The income from these funds is generally awarded to sophomores, juniors and seniors who have shown good academic performance and who also show a demonstrated 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 record has 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

Financial Aid

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. Macalester receives money from the federal and state governments but more than 75 percent of the funds in support of our total student employment program are from the Macalester budget.

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 1997–1998 academic year, the maximum award is \$2,700. 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 percent of the student's wages and the federal government pays the remaining 70 percent. 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 from the student's interest, abilities, and the pool of available jobs. Upperclass students may participate in internships and work-study employment off-campus.

Loans

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 five percent interest rate on the loan begin nine months after completion of the student's undergraduate or graduate study, or if he or she is no longer enrolled on at least a half time basis.

Federal Stafford Student Loan (Subsidized and Unsubsidized). Stafford Student Loans are available to students from families who demonstrate financial eligibility on 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, but under the Subsidized Federal Stafford Loan program, no interest is charged, nor is any repayment required while the student is in college. Under the Unsubsidized Federal Stafford Loan, the student is responsible for all interest accrued while in school, but is not required to pay this interest while in school. For all first time borrowers after

July 1, 1994, the interest is an annual variable rate based upon the 91 day T-bill + 3.10 percent and is capped at 8.25 percent.

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 + 3.10 percent that 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 colleges in the state. Students may borrow a maximum of \$4,500 per year between SELF and other loan programs during the freshman and sophomore years and \$6,000 per year the junior and senior years. This loan requires a co-signer and is a variable interest loan with interest starting at the time of the loan; repayment of the principal begins 13 months after the student leaves college.

State of Minnesota Aid

Minnesota State Grant Program. All students who are applying for financial aid must apply for a State Grant. Application is made by completing the FAFSA and CSS profile. In 1996–1997, 206 Macalester students received an average grant of \$3,250 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 complying with the requirement, Macalester College has developed the standards cited below for Satisfactory Academic Progress.

Each full time student is allowed 5 years (10 semesters) to complete a Bachelor of Arts degree and receive federal financial aid. 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 | 12 | 1.70 |
| 2 | 28 | 1.70 |
| 3 | 40 | 1.85 |
| 4 | 56 | 1.85 |
| 5 | 68 | 2.00 |
| 6 | 84 | 2.00 |
| 7 | 96 | 2.00 |
| 8 | 112 | 2.00 |
| 9 | 124 | 2.00 |
| 10 | 136* | 2.00 |

^{*} Students who matriculate before September 1, 1993 must have accrued at least 140 credits by the end of the tenth semester. Beginning in 1997–1998 the number of hours required for graduation for the graduating class of 1998 will be 134, for the graduating class of 1999 132 hours will be required, for the graduating class of 2000 130 hours will be required, 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 (January 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. Because of the recent change in the academic calendar, the number of hours required for graduation for the graduating class of 1998 will be 134, for the graduating class of 1999 132 hours will be required, for the graduating class of 2000 130 hours will be required, 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

Graduation Requirements

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 and Russian, history, humanities, 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 thirty-six 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

Graduation Requirements

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 1996, the German Department offered a course called Three Great Modernists: Kafka, Hesse and Thomas Mann.

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.

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.

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, TSWE), 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. Academic advisors use the mathematics placement examination administered to all first year students to assist students in acquiring this quantitative and computer competence.

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 will be 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

Curricular Recommendations

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.
- 6. 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.
- *Instruction in ESL.
- *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.

Instructional Policies

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.
- 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:

Grade A B+ В B-C+C C-D+ D D-NC Α-Points 4.0 3.7 3.3 3.0 2.7 2.3 2.0 1.7 1.0 0.7 1.3 0.0

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.

Instructional Policies

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.

Petitions

The Faculty Associate for Petitions is charged by the Curriculum Committee to take action on petitions for adjustments to academic rules and policies. Rules were established by the faculty in support of good educational practice and efficient flow of necessary data. Neither negligence nor ignorance of the rules is regarded as good reason for granting approval.

Students having questions concerning petitions and the petition process should consult with the Faculty Associate for Petitions. Any written petition will be

presented by the Faculty Associate for Petitions to the Subcommittee on Petitions which will either approve or deny it. An appeal in writing of a denial may be made through the Faculty Associate to the full Curriculum Committee.

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 1997-98, September 19th and Spring Term 1997-98, February 5th.) 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 from a correspondence program may be included among the academic credits transferred to Macalester.

Air Force ROTC is available to Macalester students through the Associated Colleges of the Twin Cities at the 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.

Instructional Policies

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)

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 (core and minor 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. Independent study courses may earn from one to eight semester hour credits (curriculum committee approval is required for credit of 5 or more semester hours). The departmental listings indicate which independent studies

The Curriculum

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

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).

- * Indicates the faculty member is on leave during fall semester 1997
- ** Indicates the faculty member is on leave during spring semester 1998
- *** Indicates the faculty member is on leave during the 1997-98 academic year

African American Studies

Faculty: Anthony Pinn (Program Director, Religious Studies)***, Peter Rachleff (History), Daphne Foreman (Biology)*, Robert Morris (Music), Harley Henry (English).

Part Time Faculty: Mahmoud El-Kati (History), Duchess Harris (Women's and Gender Studies)

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 that department.

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, offered in 1998), and "Introduction to Comparative North American Studies" (CNAS 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

African American Studies

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

Dramatic Arts and Dance

53 Black Theatre

English

21 American Voices (when appropriate)

52 African American Writers of the United States

History

24 Afro-American History: Slavery, Emancipation & Reconstruction

45 The Black Experience since World War II

47 Sports in the African-American Community

 $49\ \mathrm{African}\ \mathrm{Americans}\ \mathrm{and}\ \mathrm{the}\ \mathrm{Transformation}\ \mathrm{of}\ \mathrm{the}\ \mathrm{City},\ 1890\text{-}1945$

Music

55 Music of Black Americans

57 Jazz and Social Issues

Religious Studies

28 African American Religions

36 Major Black Religious Thought, 1829-1915

37 Major Black Religious Thought, 1915-1993

50 Black Christian Churches in the United States

Women's and Gender Studies

50 African American Women's History

Anthropology

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

Part Time Faculty: Sonia Patten, Emily Schultz, 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, 46, 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 freshmen

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, next offered 1997–98. (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, next offered Spring, 1998. (4 credits)

Intermediate Courses

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

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. Alternate years, next offered, Spring semester, 1998. (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 (Same as Classics 43)

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, next offered fall 1997. (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)

46 PEASANT SOCIETIES

An introduction to the forms of social and economic organization that characterize peasant societies, and the political, economic and cultural relationships which bind them to the larger state systems. Examination of the way peasant societies are transformed by the penetration of capital and modern agriculture. The course aims at an understanding of the nature of these relationships and the way in which peasants respond to the pressures that they generate. Next offered 1998–1999. (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. Next offered 1998–1999. (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, next offered Spring, 1998. (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, next offered Fall, 1997. (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, next offered Spring, 1998. (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, next offered 1998–99. (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. Fall, 1997. (4 credits)

Anthropology

62 CULTURE AND GLOBALIZATION

The world is far more interconnected today than ever before. Though not a new phenomenon, the globalization of culture is gaining significance in these times of rapidly changing communications technology and the globalization of the economy, financial institutions, multi-national corporations and government agencies. Focus will be on the transnational analysis of cultures and the analysis of transnational cultures. Course will look 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 idealogies. Course also looks at the way cultures interact at geographic borders and in the margins of society. Next offered 1997–98. (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, next offered 1998–99. (4 credits)

66 NATIONALISM AND THE MODERN WORLD

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. Spring semester, 1998. (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. Fall semester, every year. (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. Every year. (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, next offered 1997–98. (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 the development of anthropology as a discipline. The course is organized chronologically around the major schools of thought, emphasizing the assumptions made and questions asked by practitioners of various approaches. The class will be run as a seminar, with lectures, student presentations, and written papers and essays. Fall semester. 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. (4 credits)

97 INTERNSHIF

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, Ruthann Godollei***, Mayra Rodriguez, Jerry Rudquist, Stanton Sears (Chair)

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

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 studio artist or in related fields of design. 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 8–12 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 or 37; 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 may be 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, 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 may be 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, 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, 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. The critique will measure the work at the level of professional criteria.

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)

33 FILMMAKING

Students will learn basic 16mm film production and in teams of four, will write, film, edit and add synchronized sound to their own short 16mm black and white sound motion pictures. All equipment and materials are provided; a course fee of \$120 covers cost of film and equipment, to be paid at the Cashier's Office before the first day of class. (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 sculpture in a variety of media including clay modeling, direct carving in stone and wood, and bronze casting. All students are required to execute a bronze sculpture from a concept through the full range of mechanics to the ultimate phase of casting and refining of the final product. Three two-hour periods per week. 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. Field trips to local exhibits. Emphasis 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)

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 and The Head. Topics courses to be offered in 1997–98: Medieval Architecture, Ceramic Art: Wheel-Throwing. (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 1998. (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)

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 study 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 1998. (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 citystates, 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 1997. (4 credits)

66 2-D DESIGN

A series of two dimensional projects through which the components of design are introduced and applied. Discussion of the aesthetics and history of modern design, propaganda and commercial advertising. A review of contemporary design via the graphic novel, posters, etc. Hands-on work in 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 includes the continuation of 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 1998. (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. Internships for more than 4 credits are subject to prior approval by the Curriculum Committee. (1–8 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 A. Davis, Daphne R. Foreman*, Daniel J. Hornbach (Chair), Kathleen Parson, Janet R. Serie, James G. Straka, Andrea R. Tilden*

Part Time Faculty: Erika ten Broek, Eddie P. Hill, Elizabeth Jansen, Laurence Savett, Carmella Whaley, Russell A. Whitehead

Laboratory Supervisor: Steven R. Sundby, Beth Svenson

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: Cellular and Molecular 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 an approved research experience that is at the advanced level and 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.

A concentration in biology 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;

Careers in health administration, technical support, instrumentation, 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 research grants obtained by individual faculty members.

The Biology department, located in Rice Hall, comprises both teaching and 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 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 department'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 permanent and temporary ponds, a river lake, birch and oak forests, and prairie. 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.

On the campus the month of January is a time for intense research involvement or in-depth study of a topic of special interest for both faculty and students 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 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

The requirements for a major in biology are: 34 credits in biology, five supporting courses, and the Senior Presentation as the capstone experience. The 34 credits in biology must include 21, 22, 23 and 24 and four upper level courses (at least two with laboratory.) Courses numbered below 20 do not count toward the biology major. Only one section of Biology 96 or 97 may count toward the 34 required credits.

The Senior Presentation is required of all seniors as their capstone experience and consists of 1) participation in a one credit course, Senior Presentation, during the spring term, 2) the production of a major analytical paper which includes a thorough review of the literature, and 3) the delivery of an oral presentation to the department or at an approved undergraduate or professional research conference. While a research experience conducted in the department through research courses (Biology 70–79) 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.

The supporting courses must include Chemistry 13 and 37; statistics (Mathematics 27 or equivalent); an additional semester of math (e.g. calculus, discrete mathematics, or additional statistics) or chemistry (e.g. Chemistry 38 or Biochemistry); and one approved elective course from the science division. Note: Students planning to attend graduate school should discuss their plans with a faculty member. Certain upper level biology courses and other supporting courses are often required by the graduate schools in the various subdisciplines of biology.

Students who received a score of 5 on the Advanced Placement biology exam receive 4 semester credits in biology and are exempted from taking one of the four introductory courses required for the major. Students with a score of 5 or higher on the International Baccalaureate biology exam receive 8 semester credits in biology and are exempted 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 exemption and credit are given are determined in consultation with the department chair and course instructors. Credits received in the Biology department through AP or IB examinations may not be used to meet the general distribution requirement.

Major Concentration with an International Studies Emphasis

Students whose biological interests include an international aspect may complete a biology major with an international studies emphasis. 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 a minimum of six courses with significant international content. (The six supporting courses must be approved by the chair of the biology department and the Dean of the International Studies Program. They may include courses from the study abroad program, courses from other departments, and Biology 15, although the latter course cannot count as one of the eight biology courses required for the major. International courses that may be particularly appropriate for students pursuing this special major include Anthropology 11, 39, 52, 58, Biology 15, Geography 11, 32, 42, 45, Geology 28, and Political Science 26, 33.); 4) select for the Senior Presentation a biological topic with an international emphasis.

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, neuroscience or chemistry.

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 3.5 in their biology courses. Students are also required to register for a special section of Independent Research (Biology 96B-99) 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. Fall 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 in Neuroscience. First semester Macalester students only. Three lecture hours per week. Alternate fall semesters, next offered fall 1998. (4 credits)

14 BIOLOGY OF IDENTITY

This course will explore the biological basis of individual and group identity by focussing on the genetics, neuroscience and evolution of identity. We will cover such issues as the role of genes in shaping individual identity as well as methods emerging through the new biotechnologies that allow us to analyze, quantify and characterize identity in genetic terms (e.g. DNA fingerprinting, the Human Genome Project). We will also examine how the brain constructs a sense of individual and group identity by using genetic programs as well as environmental cues. Darwinian concepts of the survival of self at the expense of the other will be addressed, as well as the impact of these evolutionary "rules" on human group identity including racism and ethnic warfare. This course does not count toward the major or core in biology. Occasional offering. Three lecture hours per week. (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 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. First semester Macalester students only. Three lecture hours per week. Fall semester. (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; and what it's like to be a physician caring for patients. Didactic presentations, interactive discussions using stories from patients', students', and the instructor's experience, and related literature provide the content of the course. 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 CELLULAR AND MOLECULAR 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, Chem 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. Every semester. (4 credits)

24 ECOLOGY

An introduction to the study of ecological and evolutionary 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)

Biology

Upper Level Ecology Courses With a Lab

42 ANIMAL 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 animal 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. Spring semester. (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. Fall semester, next offered 1998. (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 1999. 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: Histology, Winter Ecology, Biotechnology and Society, Comparative Biochemistry, and Plant Development. We plan to have at least two topics courses during 1997/98 including advanced genetics and molecular biology; cell physiology and virology. (4 credits)

Upper Level Molecular and Cellular Biology Courses with Lab

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. Spring semester, next offered 1999. (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. Fall semester. (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 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 lecture hours and one four-hour laboratory per week. Fall semester. (5 credits)

Upper Level Organismal Biology Courses with a Lab

63 BEHAVIORAL NEUROSCIENCE (Same as Psychology 63)

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. Spring semester. (5 credits)

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. Spring 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. Laboratory periods will be used to examine some of the

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anatomical features and growth requirements unique to each group. Three lectures and one laboratory per week. Prerequisites; Biology 21 and 22. Fall semester, next offered fall 1998. (5 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 neuroscience. Designed for neuroscience majors or students with strong interest in neuroscience. 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. Spring semester. (5 credits)

Seminar and Research Courses

72 RESEARCH IN CELL BIOLOGY

An opportunity for the student to investigate a current topic in cell biology. Extensive laboratory and literature research is expected and a final paper reporting the results of the research is required. The research project will be selected in consultation with the instructor. Students will meet as a group once a week to discuss and present the progress of their research efforts. Prerequisites, Biology 21 and junior or senior standing and consent of the instructor. Two hours discussion and four hours laboratory per week. 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 37 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 or Psychology 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)

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. Spring semester, next offered in 1999. (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 Biology 63 (same as Psychology 63), junior or senior standing or permission of the instructor. Three discussion/lecture hours per week. Next offered in 1998–1999. (4 credits)

89 SENIOR PRESENTATION

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. Spring semester. (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-99) 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, Kathleen Parson (on leave as Academic Dean), A. Truman Schwartz, James Straka, Thomas Varberg, Wayne Wolsey (Chair)

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 11 or 21 [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 an independent topic based on a laboratory research project or a literature review.

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

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. Next offered spring 1998. (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 when offered during regular term. Next offered spring 1999. (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 when offered during regular term. Next offered spring 1998. (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 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. Next offered spring 1998. (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. (4 credits)

97 INTERNSHIP

Ordinarily restricted to seniors. Prerequisite, permission of the instructor. Internships for more than 4 credits are subject to prior approval by the Curriculum Committee. $(2-6\ credits)$

98 PRECEPTORSHIP

Prerequisite, permission of the department. (4 credits)

Classics

Full Time Faculty: Francesca Santoro L'hoir , Andrew Overman (Chair), Jeremiah Reedy

Classics is the critical study of the languages, cultures, and literatures of the ancient world. The societies of ancient Greece and Rome, the Mediterranean world, the Middle East, and cultures with faces turned toward the East are the terrain of Classics. Many of our Western traditions rest upon the worlds of Greece, Rome and the Ancient Middle East. Ancient cities and settlements are reconstructed and studied through archaeological and architectural analysis. The crises, failures, and successes of the classical world are critically examined. All this is done with a view toward what the diverse and politically volatile setting of the ancient world can teach us about our modern context.

The department prepares students for work in graduate study in Classics and a range of related disciplines; it provides a place for the intensive study of Greek, Latin and Hebrew, and Classics prepares people for law school and political science, for example, as well as for work in archaeology and architecture, among many other things. Above all, Classics provides a place for the critical analysis of ancient and foreign cultures and helps students to learn how to enter sympathetically and engage a worldview or setting quite different from their own. Classics focuses on writing, critical reading, language acquisition, and argumentation.

Students are encouraged to take advantage of opportunities for foreign study which the Classics department directs. These include summer archaeological excavations along the north coast of the Black Sea at the ancient Greek city of Chersonesus, the month of January living in, studying, and exploring Rome, "the Eternal City," and an interdisciplinary January program in Jerusalem. 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 courses in the Classics department which meet the international diversity requirement are numbered 21, 22, 27, 69, and 70.

Major Concentration

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

provide a study of the language and literature of Greece and/or Rome in the original languages.

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

The senior capstone requirement in classics may be satisfied by the senior project.

Senior Project

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

Core Concentration

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

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

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

Minor Concentration

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

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

COURSES

Greek

15, 16 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. Fall every year. (4 credits)

35 GREEK NEW TESTAMENT

Reading the Greek New Testament. Prerequisite: Classics 15. Spring every year. (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. Fall, every year. (4 credits)

62 HOMER AND THE GREEK EPIC

The ${\it lliad}$ and/or the ${\it Odyssey}$, 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. (4 credits)

87 ADVANCED READING IN GREEK

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

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 each year. (4 credits each semester)

31 INTERMEDIATE LATIN

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

32 INTERMEDIATE LATIN

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

83 ADVANCED READING IN LATIN

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

95 TUTORIAL

Prerequisite, permission of the instructor. (4 credits)

96 INDEPENDENT PROJECT

Prerequisite, permission of the instructor. (4 credits)

Classical Civilization

(Knowledge of Latin/Greek not required)

21 THE ANCIENT WORLD I: GREECE (Same as Humanities 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, next offered 1998–99. (4 credits)

22 THE ANCIENT WORLD II: ROME (Same as Humanities 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, next offered 1998–99 (4 credits)

27 WOMEN IN CLASSICAL ANTIOUITY

A study of the role of women in ancient Greece and Rome as portrayed in literature, myth, art, etc. Assigned readings from ancient epic, lyric, drama, history, oratory and philosophy should assist the student in understanding the origins of some Western attitudes toward women. Spring semester every year. (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. Alternate years, next offered spring semester 1998. (4 credits)

30 ANCIENT AND MEDIEVAL PHILOSOPHIES (Same as Philosophy 30)

Major philosophers of Greece, Rome and the medieval period. Every year. (4 credits)

43 ARCHAEOLOGY OF THE ROMAN WORLD (Same as Anthropology 43)

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, next offered fall 1997. (4 credits)

45 CULTURES IN CONFLICT: JEWS, CHRISTIANS, AND PAGANS IN CLASSICAL ANTIQUITY (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, next offered fall 1997. (4 credits)

 $47~\rm HELLENISTIC$ AND JEWISH CULTURES: GREEK AND JEWISH CONVERSATIONS IN THE GRECOROMAN PERIOD (Same as Religious Studies 50)

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. (4 credits)

50 TOPICS (4 credits)

55 THE ART, ARCHAEOLOGY, AND TOPOGRAPHY OF ANCIENT ROME

An on-site introduction and survey of the topography and major monuments of ancient Rome. The student will be taught to understand the "language" of the "mute stones" [e.g., elements of architecture (building techniques; dating according to types of brickwork; construction of tenements and private houses); art-history (the iconography of Roman political sculpture and dating techniques; iconography and styles of paintings and mosaics; the rediscovery and use of Roman techniques and motifs during the Renaissance), and the incorporation of Roman monuments into subsequent architecture as well as problems of conservation and preservation in the face of problems of the modern world. Grades will be based on four criteria: effective participation in group events; daily journal; quiz; and final project. Every year (2 credits)

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. Fall semester. (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. (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 semester 1997. (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 1998–99. (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)

Communication Studies

Full Time Faculty: Sally Caudill, Adrienne Christiansen, Michael Hofmann, Roger K. Mosvick, Clay Steinman (Chair), Dick Lesicko (Director of Forensics)

Part Time Faculty: Jerry Fisher, Leona Johnson, Howard Sinker, Doug Stone

Communication is the process that makes us human: it is through communication that we develop our identities and gain personal effectiveness. It is also through communication that we establish, maintain and change the societies in which we live. It is then a study which is central to the mission of the liberal arts. Courses in communication studies examine how communication acts are created, disseminated and mediated within a variety of contexts and settings. These include public address settings, interpersonal and organizational settings, and mass communication settings in which students come to understand the mutually influencing and interdependent nature of all communication. Throughout the curriculum a variety of courses seek to develop five essential liberal arts faculties:

- 1. Oral communication skills which are vital for one's personal, social, vocational, and political effectiveness.
- 2. Reasoning and critical thinking abilities which enable one to create and evaluate arguments, appeals, and analysis in decision making and in argumentative or persuasive discourse.
- 3. Small group and interpersonal communication knowledge by which one can understand and practice effective group functioning in relational and organizational life.
- 4. Understanding of theories of communication and modes of criticism which provide one with classical and contemporary perspectives in framing and interpreting different communication acts.
- 5. Quantitative and qualitative research methods which provide modes of inquiry and evaluative criteria by which one creates and evaluates knowledge in the field of communication.

Career Orientation

Although this department's courses are within the mainstream of liberal arts traditions, intended to provide important theory and practice for all Macalester students, concentration in communication studies learning is especially valuable for students preparing for professions such as public service, public relations, advertising, business, print and broadcast journalism, education, and law.

Internships are viewed as valuable learning experiences and the department encourages all interested students to avail themselves of these opportunities if appropriate to the background and preparation of the student. Internships sponsored by this department are available only to Juniors and Seniors who have completed at least a communication studies minor. Normally, internships are graded only as 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 Department satisfy the general distribution requirement in the social sciences but four. Comm Studies 28 meets the general distribution requirement in the fine arts, Comm Studies 36, 48 and 49 meet the general distribution requirement for the humanities.

Diversity Requirement

The course in Communication Studies which satisfies the domestic diversity requirement is number 44 Gender and Communication. The course which satisfies the international diversity requirement is number 38 Intercultural Communication.

Major Concentration

A major will require a total of nine courses under the following requirements:

- 1. Three specific courses at the foundation level—24 Argumentation, 22 Small Group Communication, and 18 Introduction to Mass Communication
- 2. Three courses at the intermediate level—courses numbered 30-60
- 3. One theory course at the advanced level—72 Human Communication Theory, 74 Theories of Rhetoric, or 76 Theories of Mass Communication
- 4. One course at the capstone level, 88 Senior Research Seminar

Minor Concentration

A minor concentration in communication studies will consists of five courses, two of which must be chosen from the three specified courses at the foundation level—18 Introduction to Mass Communication, 22 Small Group Communication, or 24 Argumentation. Students are strongly advised to take courses which introduce them to each of the major communication perspectives offered by the department.

Special Programs

The Department of Communication Studies participates in the Linguistics Program and the interdepartmental majors in International Studies and Women's and Gender Studies. Course 74 Theories of Rhetoric is cross-listed as a Linguistic course. 38 Intercultural Communication is a supporting course option in the International Studies major. 44 Gender and Communication is approved for the Women's and Gender Studies program.

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 of 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

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 every year. (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. Every semester. (4 credits)

18 INTRODUCTION TO MASS COMMUNICATION

An introduction to traditional and contemporary approaches to media studies, including issues of aesthetics, culture, effects, ethnicity, gender, history, political economy, reception, and technology. Classes are devoted to discussion of course readings and to analysis of film, newspaper, magazine, and television texts. Development of college-level skills in critical writing. Every 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. Every semester each year. (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, oral presentation of arguments. Students also receive instruction in computer assisted research and argumentation. Every 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. Alternate years, next offered spring 1998. (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, next offered spring 1998. (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 permission of instructor. Spring semester every year. (4 credits)

32 INTERPERSONAL COMMUNICATION

A study of communication in interpersonal relationships, through a group laboratory experience in which students experiment with their own communication behavior. The primary focus of the course is on the development of communication concepts and skills which are useful in improving

Communication Studies

interpersonal relationships. Study and practice in presentation of self, expression of feelings, empathic listening, confrontation, and conflict resolution are integral elements of the course. Spring semester every year. (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 to them 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. Prerequisite: 18 or permission of instructor. Spring semester, alternate years, next offered 1998. (4 credits)

36 CRITICISM OF RHETORIC

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. Fall semester every year. (4 credits)

38 INTERCULTURAL COMMUNICATION

A study of theories, models, and cases of intercultural communication including cultural assumptions and communication rules, comparative language structure and world view, intercultural values, beliefs and world views, basic differences in non-verbal and verbal strategies between cultures, and problems and opportunities in intercultural communication research. A variety of guest speakers from Asian, African, Middle Eastern, Hispanic, and other non-American western cultures are supplemented by video case studies of intercultural communication cases. Students conduct a study of communication modes and strategies representative of a student from one non-English speaking culture. Fall semester. (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. Alternate spring semesters, next offered spring 1999. (4 credits)

42 NONVERBAL COMMUNICATION

This course is an empirically based study of the origins, functions and scope of nonverbal communication. Since nonverbal communication must be examined as part of our human symbolic system, some elements of verbal communication are included, comparing and contrasting verbal and nonverbal codes. However the primary emphasis of the course is the study of nonverbal communication via the typology of kinesics, haptics, vocalics, physical appearance, proxemics, chronemics and other environmental or artifactual elements. It also examines the cultural, racial gender and personality components of nonverbal behavior in relational, instrumental, expressive, persuasive and deceptive communication. Alternate fall semesters, next offered fall 1998. (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 preferences 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 spring semesters, next offered fall 1999. (4 credits)

46 THE ELECTRONIC MEDIA IN AN INTERNATIONAL AGE

This course examines the structures, politics, economics and program contents 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; communication studies 18 or instructor's permission. Next offered fall 2000. (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 1998. (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 1999. (4 credits)

50 TOPICS

The following are some of the topics courses which we have offered in the past or hope to offer in the future: Rhetoric of Ethnic Minority Social Movements, Political Communication, Negotiation and Conflict Resolution, Conversation Analysis, Television and Representation of Ethnicity, Trends and Effects of Communication Technology, and Cuban Cinema. Critical Issues and Public Advocacy. In 1997-98 the department intends to offer the following Topics courses: The Rhetoric of Ethnic Minority Social Movements, Documentary History and Theory, and Computer Mediated Communication. (4 credits)

58 LEGAL COMMUNICATION

The study of the role of communication in American legal institutions. The course includes analysis of communicative behavior of lawyers, judges, clients and juries. Processes studied include conference interviews, bargaining, trial advocacy, jury deliberation and decision writing. (4 credits)

60 FREEDOM OF SPEECH IN A MASS MEDIA SOCIETY

This course focuses on the consequences to First Amendment liberties that result from the growth of the mass media and the closure of public spaces. It examines changes in First Amendment doctrine, the political economy of media as an important determinant of the extent to which expression is free, and theoretical explanations for the power of ideas and their transmission. This course also analyzes the political consequences of the shrinking of public space in numerous conflicts such as censorship of music lyrics, government support of the arts, the regulation of pornography, the harms of hate speech, and the attack on "political correctness" in the academy. (4 credits)

72 HUMAN 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 and small group communication,

Communication Studies

organizational and intercultural communication. Course allows for study of selected literature and concentrations in areas of special interest. Alternate spring semesters, next offered spring 1998. (4 credits)

74 THEORIES OF RHETORIC (Same as Linguistics 49)

A study of classical and modern theories of rhetoric, with major focus on theories and structures applicable to critical appraisal of spoken and written persuasion. Students will examine theories of selected writers from Aristotle to Kenneth Burke. They will apply principle by critical evaluation to historical and contemporary speeches, essays, novels and plays. Critical methods for studying leaders, movements and historical periods will be analyzed. Alternate spring semesters, next offered 1998–99. (4 credits)

76 THEORIES OF MASS COMMUNICATION

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 Jurgen 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: 18, 34, or permission of instructor. Alternate years, next offered spring 1999. (4 credits)

88 SENIOR RESEARCH SEMINAR

All majors, including seniors in an honors program, are required to take this course during the fall or spring semester of their senior year. The course examines common research, objectives and methods in the field of Communication Studies. Each student develops and conducts a significant piece of research in a field of their choice. The research project is presented and critiqued both as an oral presentation and in the form of a paper which demonstrates effective scholarly writing. 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 and/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 a wide variety of educational, business, governmental institutions for students who have completed a communication studies minor. 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. Four semester credits are awarded upon the completion of four semesters of practicum experience with a satisfactory rating of forensic supervisors and approval of the department. 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 nine required credits or 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.

Comparative North American Studies

Full Time Faculty: Ann Braude (Religious Studies), Ruth Burks (English)***, Janet Carlson# (Chemistry, Director), Diane Glancy# (English), Galo González # (Spanish), Carol Horton (Political Science)***, Mahnaz Kousha# (Sociology)***, Teresita Martínez-Vergne (History), Anna Meigs# (Anthropology), Robert Morris (Music), Anthony Pinn (Religious Studies)***, Peter Rachleff (History), Calvin Roetzel# (Religious Studies), Clay Steinman# (Communication Studies), James Stewart# (History), Jack Weatherford (Anthropology)

Part Time Faculty: Mahmoud El-Kati (History), Duchess Harris (Women's and Gender Studies), Sowah Mensah (Music), Alexs Pate (English), David Sunderland (Spanish)

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 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

50 TOPICS

Introduction to Comparative North American Studies

This course counterpoises historical with contemporary approaches to issues and problems of "race" in the development of politics, economy and culture of the United States. Equal parts of the course will be devoted to two widely separated points in time—1) the periods in the past when African, English, Asian, Spanish and American Indian people first began "discovering" one another and developing categories of "race"—and 2) the 20th century, our own time of multiple conflict over what "race" means, how "race" is represented and how varieties of racism and radicalism shape our current situation.

Historical inquiries address such topics as various European "styles" of conquest and colonialism; the dynamics of racial enslavement and the suppression of indigenous peoples; the transformation of indigenous peoples into "Indians," Africans into "blacks," and Asians into "yellow people;" the biological "mixing" of peoples and the relationship of racism to sexuality and gender roles; and the processes of accommodation, acculturation and resistance among "non-caucasian" peoples.

Contemporary inquiries will emphasize race and racism as expressed in the electronic media and popular culture, in competing ideological formulations, and in evolving constructions of individual and collective identity. Offered every year. (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 CNAS Steering Committee. (4 credits)

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

98 PRECEPTORSHIP

Preceptors assist CNAS faculty in planning, organizing and teaching courses. A preceptorship may not be counted toward a CNAS 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

Dramatic Arts and Dance

53 Black Theatre

East Asian Studies

45 Living on the Edge: The Asian American Experience

English

50 African American Men Writers

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 African-American Community

49 African Americans & the Transformation of the City, $1890\!-\!1945$

50 Topics: Latinos in the US

Music

55 Music of Black Americans

57 Jazz and Social Issues

Religious Studies

28 African American Religions

36 Major Black Religious Thought I: 1829-1915 37 Major Black Religious Thought II: 1915-1993

43 Native American Religious Traditions

50 Topics: Black Christian Churches in the United States

Spanish

50 Topics: The Family as History: The Stories of Latinos in the US

Women's and Gender Studies

50 Topics: African American Women's History

Group B

Anthropology

41 Race, Race Privilege, Whiteness

Communication Studies

50 Topics: Racism and the U.S. Media

History

31 Black, White and Red in American History

Political Science

42 Race, Ethnicity and Politics

Computer Science

See Mathematics and Computer Science

Dramatic Arts and Dance

Full Time Faculty: Beth Cleary, Sears Eldredge (Chair)***, Faye Fei, Becky Heist, Daniel Keyser, William Sun

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

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. The struggle to "get inside" the works of dramatists as diverse in time, place and spirit as Shakespeare, Brecht, Zeami, Fornes, Sophocles, Churchill, Fugard, etc., is 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 learn 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.

General Distribution Requirement

Dramatic Arts courses 18, 19, 20, 21, 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 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 should try to take Dramatic Arts 20, 25, 35 in their first three semesters. They must pay particular attention to the History of Theatre requirement and fulfill those credits by their Junior year if possible.

Majors in dramatic arts take a core of ten courses plus performance involvement each semester in residence completed with a satisfactory rating. This core of courses gives them a foundation in the major disciplines of theatre: history, theory and criticism; acting; directing; design and technical theatre as well as practical experience. Each student then chooses an area of specialization for more in-depth course work and training. Majors in the program must 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, functioning as a dramaturg, or directing a show for the one-act play festival as part of the regular season. Students work closely with faculty 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

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 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*:

Mask Improvisation
Advanced Acting

Design/Technical Theatre Emphasis

Lighting Design Advanced Lighting Design Advanced Scene Design Directing Emphasis*:
Advanced Directing
Advanced Acting

History/Theory/Criticism Emphasis:

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 the department.

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.

Departmental Expectations for All Majors and Minors:

- -all majors/minors will audition for the productions each semester
- —all majors/minors not cast will be assigned to work on one show 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.

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, 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.

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.
- $3. \, \mbox{Supporting courses}$ recommended are Dramatic Arts 18, 20, 25, 40, and Humanities 27.

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

Dramatic Arts and Dance

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. Next offered fall 1997. (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. Next offered fall 1997. (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 Playwrighting, 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 1998–99. (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 1997–98. (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 1999. (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 1997. (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

Dramatic Arts and Dance

the growth and impact of Interculturalism on the theatre of the future. Recommended prerequisite: Dramatic Arts 62. Next offered spring 1998. (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, 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 1999. (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 1999. (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 60 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 or 218.

- 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.

- 105 Dance Practicum*
- 112 Jazz Dance
- 122 African Dance
- 144 Modern Dance I
- 150 Ballet I
- 244 Modern Dance II
- 250 Ballet II
- 344 Modern Dance III
- 350 Ballet III
- 375 Dance Ensemble**

^{*}Students can receive one credit for completing a minimum of 45 hours of tech such as costuming, running crew, or sound operator.

^{**}Selected by auditions in early fall, the Ensemble members are expected to participate during both semesters.

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)*, 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.

Diversity Requirement

The course in East Asian Studies which satisfies the domestic diversity requirement is 45, Living on the Edge: The Asian American Experience.

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 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

Area Studies Course

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, and discussing the current issues of several Asian American communities. Topics include the role of women, stereotype, racism and assimilation. This course meets the East Asian Studies requirement as a Social Sciences and Interdisciplinary course. Spring semester. (4 credits)

In addition to courses offered through the East Asian Studies Program, 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

- 15 Intensive Elementary Japanese
- 31 Intermediate Japanese I
- 32 Intermediate Japanese II
- 35 Intensive Intermediate Japanese
- 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 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 Modern Japanese Literature in Translation
- 50 Modern Japanese Literature: Major Writers
- 62 Analyzing Japanese Language

International Studies

- 50 Introduction to Chinese Literature
- 50 20th Century Chinese Fiction
- 50 China in the 20th Century
- 50 Classical and Modern Chinese Poetry
- 50 Chinese and Western Literature: A Comparative Study

C. East Asian Religions and Philosophy

Religious Studies

41 Religions of East Asia

Philosophy

- 37 Chinese and Japanese Philosophies
- 87 Seminar: Asian Philosophy

D. East Asian Arts

Dramatic Arts

68 Asian Theaters: Tradition, Continuity, and Change

76 Far Eastern Art

Supporting Courses

Religious Studies 24, Introduction to Non-Western Religions

Economics 25, Comparative Economic Systems

Economics 35, Economics Of The Transition

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*, N. J. Simler (Chair), Vasant Sukhatme

Part Time Faculty: T. Jeffery Evans

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.

Program in Entrepreneurial Studies

A program in entrepreneurial studies has been in existence since 1982. The program assists students in thinking as entrepreneurs and provides practical guidance on how to carry an idea from conception to completion.

The curricular components of the entrepreneurial program consist of an upper level course (58) and occasional topics courses (50) emphasizing a particular entrepreneurial theme. Internships also are available. Among the entrepreneurial themes covered in recent years were business failures, international entrepreneurship and entreprenentors.

Internship Program

The department actively collaborates with the Career Development Center in creating off-campus 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 teaching laboratory, equipped with 21 Macintosh computers and spreadsheet, statistical and simulation software, is used for econometrics and other economics courses. The lab is connected to the campus information network as well as the internet, which is a worldwide electronic network of scholars, libraries and other information sources.

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.

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 Econ 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 Econ 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 Econ 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 Econ 51 (Intermediate Microeconomic Analysis) and applied courses which have 51 as a prerequisite; the 60s category contains Intermediate Macroeconomic Analysis (Econ 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 year. (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

An 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, 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, 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, 19. Alternate years, next offered 1998–99. (4 credits)

25 COMPARATIVE ECONOMIC SYSTEMS

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. Every year. (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, 19. Every year, next offered spring 1998. (4 credits)

Economics

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, 19. Alternate years, next offered spring 1998. (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, 19. Alternate years, next offered 1997–98. (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, 13 or instructor's permission. Spring semester. (4 credits)

35 ECONOMICS OF THE TRANSITION

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. Next offered 1997–98. (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, 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, 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; Economic History of Latin America; International Entrepreneurship; and Advanced Econometrics (in a two-credit version as a service to students wanting additional work in this area). Information on topics courses to be offered in 1997–98 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, 19, any Economics course in the 20s, and Math 21. 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, 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. Recent examples are international entrepreneurship and corporate venturing. 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, 13 and 51. Every year. (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, 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, 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, 61. Alternate years, next offered 1998–99. (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, 51 and 61. Alternate years, next offered 1998–99. (4 credits)

$72\ \mathrm{THEORY}$ 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, 51 and 61. Alternate years, next offered spring 1998. (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

Economics

within the household, occupational choice, investments in education, minimum wage legislation, wage elasticities, employment-hours tradeoff, labor market discrimination, unions, and job search. Prerequisites, 41, 51, 61. Alternate years, next offered spring 1999. (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: 41, 51, 61 and Math 21 and 36. Alternate years, next offered fall 1998. (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, 51 and 61 (Math 22 recommended). Alternate years, next offered 1998–99. (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, 51 and 61. Alternate years, next offered spring 1999. (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, 51 and 61. Alternate years, next offered fall 1997. (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, 51 and 61. Alternate years, next offered 1997–98. (4 credits)

96 INDEPENDENT PROJECT

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

Education

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

Part Time Faculty: Elizabeth Halden, Don Johansen, Michael Scanlan, Diana Swanson, Ross Taylor, 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 Education and the Minnesota State Board of Teaching, and by the National Council for Accreditation of Teacher Education (NCATE).

Candidates preparing for teaching are counseled by an advisor in education. In addition to the general graduation requirements, candidates complete a core or major concentration and the professional education sequence. Upon successful completion of the program and graduation, the College recommends candidates to the State Department of Education 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.

As licensure requirements are subject to change at the discretion of state regulatory agencies, students 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 describing 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 including: drug education, school health and first aid, media proficiency, and bibliographic instruction.

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: Sociology 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. Morning 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, afternoon seminar sessions (alternate days), and individual term projects. Prerequisites: Instructor's signature, completion of placement request form. (4 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)

$39\,\mathrm{PHILOSOPHY}$ 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)

Education

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, HEALTH

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. Summer. (4 credits)

50 TOPICS

Occasional, often experimental, courses offered by instructors at their own initiative, or in response to student requests. Topics offered in 1997–1998 include *Race, Ethnicity, and Culture in Education*, a study of the role of educational institutions in these dimensions of identity and society. Spring semester. (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

A capstone experience designed to insure full integration of program goals and licensure requirements. Fall sessions include bibliographic instruction, audio-visual proficiency, first-aid and school health, and drug education. Spring seminars explore a variety of topics such as multicultural education, inclusive education, conflict resolution, educational technology, and roles of parents, social services and community in supporting schools. (1 credit fall/1 credit spring)

95 TUTORIAL

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 INTERNSHIP

Requires some background and expertise. Primarily for juniors and seniors. Prerequisite, permission of the instructor. (4 credits)

98 PRECEPTORSHIE

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, John Bernstein, Ruth Burks***, Giles Gamble, Diane Glancy, Alvin Greenberg, Harley Henry (Chair), Roy Kay, David Moore (International Studies/English), Peter Murray, Sonita Sarker (Women's and Gender Studies/English), Linnea Stenson (English/Women's and Gender Studies), Robert Warde***

Part Time Faculty: Janet Holmes, Alexs Pate

Adjunct Faculty: Susan Toth

The mission of the English department is to teach creative and expository writing, textual interpretation, and a knowledge of literary history along with an understanding of issues relevant to the study of literature. The department is especially committed to including in its curriculum work by women, African Americans, Latin Americans, American Indians, and writers from other countries; also to continuing its development of new approaches to both traditional and non-traditional literatures.

General Distribution Requirement

All courses in the English department satisfy the general distribution requirement in the humanities except for courses numbered $10,\,11,\,12,\,40,\,41,\,42,\,43,\,45,\,80,\,81,\,82,\,95,\,96,\,97,$ and 98. Courses numbered $12,\,41,\,42,\,43,\,80,\,81,$ and 82 satisfy the requirement in fine arts.

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, a Portfolio Project, 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*.
- 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 cultural heritage, one course (4 credits) in American literature before 1900 selected from among the 70s courses and 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.
- 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. To create a substantive record of work in the major, each student will compile, with the assistance of a faculty advisor, a Portfolio of the significant writings she or he develops during the junior and senior years.
- 8. 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:

Advanced Placement credit for English 20 does not count. English 10 does not count

No more than two courses from the 20s (8 credits) may be counted.

Only one cross-listed humanities course (English 30, 31, 32, 33) (4 credits) may be counted.

One preceptorship and one internship (for a maximum of eight credits) relevant to a student's work as an English *major* may be counted. (An English *minor* may not include a preceptorship or an internship.)

Students seeking teaching licensure in English may count their second practice teaching unit/course (Education 64, 65, 66, or 67).

One course (4 credits) in the study of a foreign literature taught in a Foreign Language Department at Macalester may be counted.

Plan B: Based on their performance in their first two English courses (8 credits), and supported by a written rationale developed in consultation with their English department advisor, students may apply to the department for a plan differing from Plan A. Their progress will be evaluated in the second semester of their junior year to ensure that their performance properly supports their stated academic and post-graduate aims.

Creative Writing Emphasis

English majors wishing to develop a concentration in creative writing are expected to fulfill the requirements for the English major as defined above (Plan A or Plan B) and to utilize their departmental electives for at least three creative writing courses (12 credits). In addition to extensive course offerings in creative writing, options also 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.

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.

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. Those interested should consult Robert Warde, the department's advisor to the program.

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.*

Introductory Writing Courses

10 WRITING I: 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)

11 WRITING I: COLLEGE WRITING—ESL

This course offers instruction and practice for students whose native language is not English to improve their writing abilities for college-level assignments. Some work will be done in the computer lab to provide instruction in writing with the word processor. Other work will include workshops in which students work collaboratively on the writing process—planning, revising, and editing. (4 credits)

12 WRITING I: 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 both instruction in writing and an introduction to current developments in literary theory and criticism.

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, Native American literature, 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 culture. Consult the detailed course descriptions in the English department for the content of individual sections. 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, next offered fall, 1997. (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. Next offered 1997–98. (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 24)

Classics of European, including British, theology, philosophy, and literature, with some attention to corollary movements in art and architecture. Alternate years. Next offered fall 1997. (4 credits)

31 THE MODERN WORLD I (Same as Humanities 25)

Classics of European, including British, art, philosophy and literature from the 17th and 18th centuries. Alternate years. Next offered 1998–1999. (4 credits)

32 THE MODERN WORLD II (Same as Humanities 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. Next offered 1998–99. (4 credits)

English

33 THE MODERN AND POSTMODERN WORLDS (Same as Humanities 27)

Studies in the 20th century literature, arts, and philosophy of Europe and the Americas. Alternate years, next offered 1998–99. (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. Next offered fall, 1997. (4 credits)

35 LANGUAGE CHANGE (Same as Linguistics 35)

All languages constantly evolve. In the relatively short time that English has been written, it has changed beyond recognition. 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. This course fulfills the state requirement of a course in the structure and history of English for licensure in English for secondary education. There is no prerequisite, but English students 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 II: PRE-PROFESSIONAL WRITING

This course is for students preparing to work in natural science or social science professions as well as for students in the humanities. Each student will be directed to design her or his own writing regimen to concentrate on developing the writing abilities most valued in her or his chosen academic discipline or profession. According to each student's needs, individual practices may range from developing exploratory essays to preparing grant proposals. Students will also learn to respond constructively to one another's writings. At least one section of the course each year will offer instruction in word processing. Every year. Next offered spring, 1998. (4 credits)

PREREQUISITES: Students may register for the Creative Writing courses at levels II and III only after they have taken English 12 at Macalester.

41 WRITING II: POETRY

This intermediate-level poetry writing course divides its attention between the writing process itself and the continuing study of both the technical resources for poetry and the work of contemporary poets. Individual conferences will supplement classroom work on readings, writing assignments, and in-class writing exercises. PREREQUISITE, English 12 (Introduction to Creative Writing). Every year. Next offered fall, 1997. (4 credits)

42 WRITING II: FICTION

This intermediate-level fiction writing course divides its attention between the writing process itself and the continuing study of both the technical resources for fiction and the work of contemporary short story writers. Individual conferences will supplement classroom work on readings, writing assignments, and in-class writing exercises. PREREQUISITE, English 12 (Introduction to Creative Writing). Every year. Next offered spring, 1998. (4 credits)

43 WRITING II: SCRIPTWRITING

The emphasis of this writing course is on written dialogue and dramatic action. The course is designed to produce brief scripts. Some semesters it may be taught in conjunction with the theater department's Director's Workshop. PREREQUISITE, English 12 (Introduction to Creative Writing). Alternate years. Next offered spring, 1998. (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. Every year. Next offered 1999. (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. Some recent titles are: "Love and Sex in Shakespeare," "American Fiction and the Cold War," "Mice, Molecules, and Metaphors: Writers Look at the World of Science," "Images of African Americans in Contemporary Hollywood Films," and "Women Writers as Artists and Critics." 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. Next offered 1998. (4 credits)

52 AFRICAN AMERICAN WRITERS OF THE U.S.

A study of selected Black American poets, dramatists, and fiction writers. This course may focus on a specific topic, such as recent fiction (e.g., Morrison, Walker, Wideman) or may have an historical focus (e.g., the Harlem Renaissance). Alternate years. Next offered 1998. (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, Linda Hogan, and Joy Harjo. Alternate years. Next offered 1998. (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. Next offered 1999. (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; a recent version of this course, for example, focused on the development of contemporary literature—primarily fiction—in Zimbabwe. Alternate years. Next offered fall, 1997. (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. Next offered 1998. (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. Next offered 1998. (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

English

consult the specific course description in the English department. Alternate years. Next offered 1999. (4 credits)

59 TWENTIETH CENTURY ANGLOPHONE WOMEN WRITERS (Same as Women's and Gender Studies 60)

A study of the works of women authors from India, England, Ireland, the Caribbean, and Western and Southern Africa. Students will study either an author and her particular context or conduct a comparative and thematic study of a few authors. The goal of this course is to explore how and why the writings address issues such as gender, language, power, the influence of professional writers, colonialism, nationalism, sexuality and commercialism. 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, and Chaucer's *Canterbury Tales*; major emphasis on the rise of Arthurian romance and legends of the Holy Grail in both British and Continental versions. Due consideration will be given to available primary materials by women and to issues of gender, class, and ethnicity. Alternate years. Next offered fall, 1998. (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. Next offered fall, 1997. (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 will supplement the reading of the texts. Every year. Next offered spring, 1998. (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. Next offered spring, 1998. (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. Next offered, 1999. (4 credits)

65 THE ROMANTIC PERIOD

The works of Blake, Wordsworth, Coleridge, the Shelleys, Byron, Keats, Hazlitt, De Quincey, and 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 is placed on the distinctive responses of each writer to these changes, and on the nature of romanticism. Alternate years. Next offered, 1999. (4 credits)

66 THE BRITISH NOVEL IN THE NINETEENTH CENTURY

The fiction of such authors as Austen, Dickens, Thackeray, the Brontes, Gaskell, Trollope, Eliot, Meredith, and 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. Next offered, 1999. (4 credits)

67 THE VICTORIAN PERIOD

British literature from the 1830's to about 1900, emphasizing poetry and non-fiction prose by Tennyson, the Brownings, Arnold, the Rossettis, Morris, Swinburne, Carlyle, Mill, Ruskin, Pater, Wilde, and others. Attention is paid to social, economic, political and scientific developments of the age;

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. Next offered, 1998. (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 Yeats, Joyce, Lawrence, Murdoch, Spark, Green, and Rushdie. Alternate years. Next offered, 1998. (4 credits)

69 INDIVIDUAL BRITISH AUTHORS

A study of single authors, pairs of authors, or related groups of authors: e.g., Milton, the metaphysical poets, Jane Austen, the Pre-Raphaelites, the Bloomsbury group. Alternate years. Next offered, 1999. (4 credite)

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, Marianne Moore, Wallace Stevens, Langston Hughes, F. Scott Fitzgerald, Richard Wright, and William Faulkner, studied in their social/historical contexts. Alternate years. Next offered, 1998. (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, Adrienne Rich, August Wilson, and others who have published major work in recent decades. Alternate years. Next offered, 1998. (4 credits)

74 INDIVIDUAL AMERICAN AUTHORS

A study of single authors, pairs of authors, or related groups of authors: e.g., Melville; Twain and Dickinson; Henry James and his circle. Alternate years. Next offered, 1998. (4 credits)

76 TWENTIETH CENTURY POETRY

An analysis of twentieth century poetry from such traditional figures as Yeats, Eliot, and 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. Next offered fall, 1997. (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 Strindberg, Chekhov, Lorca, O'Neill, Beckett, Hellman, MacDonald, and August Wilson. Alternate years. Next offered spring, 1998. (4 credits)

80 WRITING III: 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. Next offered fall, 1997. (4 credits)

81 WRITING III: POETRY WORKSHOP

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. Next offered fall, 1997. (4 credits)

English

82 WRITING III: FICTION WORKSHOP

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. Next offered spring, 1998. (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. Alternate years. Next offered, 1999. (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. Next offered, 1998. (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, the American Literature of Vietnam, Irish Literature, Questions of Knowledge and Ignorance in Contemporary Fiction. 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 covered in any of the above 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 Internship Coordinator and the faculty sponsor). Internships for more than four credits are subject to prior approval by the Curriculum Committee. (Normally 4 credits; more may be arranged for if the Internship requires a larger time commitment)

98 PRECEPTORSHIP

Work assisting a faculty member in planning and teaching a course. Prerequisite, invitation by a faculty member. (4 credits)

Environmental Studies Program

John Craddock (Geology), Mark Davis (Director, Biology), Julie Bunn (Economics), Chuck Green (Political Science), Susanna McMaster (Geography)*, Karen Warren (Philosophy), Wayne Wolsey (Chemistry)

The goal of this interdepartmental major is to provide students with a basic understanding of environmental processes and issues (locally and world wide), and to help students develop the verbal, analytical, and quantitative skills needed to address the environmental problems facing the world today. The major emphasizes the need for an interdisciplinary approach in searching for effective remedies to these problems. One objective of this broad-based program is to prepare students for further work in the environmental field. A second is to help students develop and refine their own environmental values; and a third is to help students identify ways in which they can translate their values and ideas into action.

The interdepartmental major in environmental studies consists of six components:

- 1. Four introductory courses,
- 2. A course in either statistics or computer skills,
- 3. A major (or core concentration) in an appropriate department in either the natural science or social science/humanities area.
- 4. An approved cluster of three courses in an appropriate department in the area (natural science or social science/humanities) not chosen above in (3),
- 5. The Senior Seminar in Environmental Studies as the capstone experience,
- 6. An internship.

These components are described in detail below:

1. All majors are required to take the following introductory courses:

Economics 19: Principles of Economics Geography 16: Physical Geography Geology 11: Physical Geology

and one of

Biology 15: Global Biodiversity

Biology 24: Ecology

- 2. Majors must demonstrate basic competency in statistics or computer science by completing *one of* Mathematics 14, Data Analysis and Statistics, Mathematics 27, Elementary Statistics, or Computer Science 23, Computer Science I. Students planning to take statistics should take Mathematics 14 if their environmental interests are primarily in the social sciences and Mathematics 27 if their interests are primarily in the natural sciences.
- 3. Majors in environmental studies must also complete a core or a major in an approved department. The departments listed below are automatically approved. Students wishing to combine an environmental studies major with a

Environmental Studies

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

4. Students also will select and complete an approved set of three courses from a single department in the area (Natural Science, Social Science/Humanities) opposite that of the major. Selections made from among the following groups are automatically approved. Other groups of courses chosen from these or other departments require approval of the environmental studies director.

Natural Science

- 15 Global Diversity and the Biology of Conservation
- 24 Ecology
- 42 Animal Ecology
- 43 Aquatic Ecology
- 45 Field Botany
- 46 Marine Biology
- Courses at the ACM Wilderness Field Station

Chemistry

- 10 Chemistry in Context
- 11 and 13 General Chemistry
- 23 Analytical Chemistry
- 37 and 38 Organic Chemistry
- 49 Radiochemistry

- Geology 11 Physical Geology
- 15 Oceanography 22 Water Resources
- $23\ \mathrm{Natural}\ \mathrm{History}$ of the National Parks
- 25 Environmental Geology
- 28 World Resources and the Environment
- 61 Geomorphology

Physics and Astronomy

- 21 and 22 Introductory Physics
- 26 and 27 Principles of Physics
- 42 Electronics

Social Science/Humanities

Anthropology

- 11 Cultural Anthropology
- 30 Ethnographic Interviewing
- 39 Medical Anthropology 52 Contemporary Cultures of Latin America
- 56 Peoples and Cultures of South Asia
- 60 The Anthropology of Tourism

Economics

- 19 Principles of Economics
- 22 Environmental Economics and Policy
- 51 Intermediate Microeconomic Analysis
- 59 International Economic Development

Geography

- 10 Introduction to Geography: Concepts and Regions
- 11 Human Geography
- 16 Physical Geography
- 25 Cartography
- 32 People and the Environment
- 41 Urban Geography
- 42 Regional Geography of North America
- 45 Regional Geography of the Post Soviet Union
- 46 Landscape Ecology
- 64 Geographic Information Systems
- 65 Advanced Cartography
- 78 The Discipline of Geography
- 88 Seminars

Philosophy

- 15 Problems in Philosophy
- 25 Ethics
- 29 Feminism and Environmental Ethics
- 60 Philosophy of Science
- 67 Peace Studies

Political Science

- 10 Introduction to Political Analysis
- 20 Foundations of U.S. Politics
- 46 Urban Politics
- 47 Policy Issues
- 49 Science, Technology, and Politics
- 63 Development Politics
- 72 Political Development
- 74 Policy Analysis and Evaluation
- 79 Political Change
- 5. In the spring term of the senior year, majors must take the Senior Seminar in Environmental Studies.
- 6. Majors are required to complete an internship in environmental studies during the junior or senior year.

COURSES

50 TOPICS (4 credits)

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. Prerequisite, sponsorship by a faculty member on the Environmental Studies Coordinating Committee. (4 credits)

French

Full Time Faculty: Françoise Denis, Philip Lee, Virginia Schubert (Chair), Joëlle Vitiello

Part Time Faculty: Anne Carayon*, Annick Fritz-Smead

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 areas as they relate to France and the Francophone world.

The study of French not only makes available to students 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 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 professional schools or to graduate programs 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 broadcast 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 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. The French Department has participated in programs in France such as those with the Institute of American Universities at Avignon and Aix-en-Provence and with the University of Minnesota program at Montpellier. 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 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.

Macalester College Semester Program in Rennes (French and Economics)

The French Department, in cooperation with the Department of Economics, offers a program that includes: a) advanced work in economics; b) a three month internship beginning in May with a cooperating French company or agency; c) the experience of living in a French social, cultural and intellectual environment.

The host institution is the Institut de Gestion (School of Business Administration) of the University of Rennes, France. The program is particularly suited for students of advanced standing. Students must be declared majors or cores in Economics; they need not be declared majors or cores in French, but must have completed advanced work in French and be able to successfully complete university courses taught in French for French graduate students. For brochure and application procedures, please contact Dr. Schubert in the French 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 an 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

Beginning with the class of 1997, majors and cores 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 the departmental brochure.

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 the French press, 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. Fall 1997. (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. Discussions will deal with topics chosen from the media. This class may not be counted for a major, core or minor in French. Prerequisite: French 51 or 52, 600 on the placement exam or permission of the instructor. Spring 1998. (2 credits)

45 THE EXISTENTIAL WOMAN

Starting with Sartre's and de Beauvoir's definition of the human person, the student will assess female figures in literature and life. Individual study and research will be encouraged for evaluation of characters significant to the students, either in literature (French, English, American, etc.) or in biographical and autobiographical materials (journals, diaries, etc.) Finally, the characters will be evaluated in existential terms of freedom and responsibility as applied to the human condition in general. Taught in English. (4 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" will be 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, articles from the French and Francophone press, and commercial clips. 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 descriptive and 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 Vietnam.) Materials used include: short stories, poetry, films, slides and articles from the press. Prerequisite, French 52 or permission of the instructor. Alternate spring semesters, next offered spring 1998. (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 the 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 semester. (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 1998. (4 credits.)

68 ART AND IDEAS IN FRENCH CULTURE (Same as Humanities 68)

The course studies the arts of France (art, architecture, music and literature) in their historical and intellectual settings. Taught in English. For French credit, students must do the readings and write papers in French . Prerequisite for French credit, French 52 or permission of instructor. Alternate spring semesters, next offered spring 1999. (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," exploring its humanistic inheritance, its libertine and baroque currents and its 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 1997. (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 fall semesters, next offered fall 1998. (4 credits)

75 NINETEENTH CENTURY LITERATURE

This course studies 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 include Stendhal (*Le Rouge et le Noir*), Balzac (*La Peau de Chagrin*), Flaubert (*Mme Bovary*) and Mérimée (*Carmen*) along with Bizet's opera of the same name. 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 and the *opera-bouffe* by Offenbach, *La Vie Parisienne*. Prerequisite, French 52 or permission of instructor. Alternate spring semesters, next offered spring 1999. (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 1999. (4 credits)

77 FRENCH WOMEN WRITERS

The course is a survey of literature written in French by women across the centuries, 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 Bâ (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 1998. (4 credits)

Advanced Courses

83 ADVANCED STYLISTICS

Advanced work in stylistics leading to the development of a personal style in French and expression in 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 PRECEPTORSHIP

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 Department of Geography offers 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.

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, 46, 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

Each student is expected to design his or her own major or core program in consultation with a member of the faculty. A major program must contain at least eight geography courses and must include Geography 10 or 11, 16, 25, 78; three electives, and one seminar at the 88 level. 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.

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, unless the student is excused by the department chair, and six complementary in 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, 41, and one elective from the courses offered within the department. This course combination is especially appropriate for students planning to teach social studies. 2) The land use planning minor consists of Geography 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 studies minor consists of Geography 10 or 11, 16, 25, and one regional geography course on an area of

the world other than North America. 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), 32 (People and their Environment), 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

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 CARTOGRAPHY

Projects in this course focus on preparation of thematic maps and include both data analysis and map design. Output technologies involve hand drafting and computer drawing. The course emphasizes concepts that are fundamental to use of GIS (geographic information systems) and geographic visualization: map scale, data sources and data types, categorization and sampling schemes, coordinate systems and projection systems. 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 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. 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. Alternate years, next offered 1997–98. (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, next offered in 1998. (4 credits)

46 LANDSCAPE ECOLOGY

An examination of the distribution ecosystems within the landscape. Special emphasis will be placed on environmental factors that affect these distributions, the impact of humans on ecosystems, and

Geography

landscape changes through time. Students will carry out individual research projects. Prerequisite, Geography 16. Alternate years, next offered 1998–99. (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 maps, map projections, and spatial analyses. Currently, we employ several software packages on DOS and windows platforms for detailed experience with digitizing, TIGER files, address coding, database modification, importation of census data, and overlay-buffering analyses. Three hours lab per week is required. Materials fee is required. Prerequisites, Geography 25 and permission of instructor. Every semester. (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. Prerequisite, Geography 41 or permission of the instructor. Alternate years, next offered fall 1998. (4 credits)

Historical Geography of Urbanization

The development of urban settlement forms throughout the world. The genesis of contemporary American landscapes with an emphasis on the Middle West. Field trips and individual projects. Prerequisite, Geography 41 or permission of the instructor. Alternate years, next offered fall 1997. (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 1998. (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 INTERNSHIE

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), Ray Rogers, Jerry Webers, Greg Wiles, Karl Wirth***

Lab Supervisor: Jeff Thole

The introductory courses in geology (Geology 11 through 28) 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 X-ray fluorescence unit. The geology computer lab has eight Mac II's, four IBM "386-compatibles", and a DEC Microvax with software for satellite imagery analysis linked to the campus Alpha system.

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 courses in biology or physics. In addition, students must select at least three electives in geology. Those students planning careers in such fields as geochemistry, geophysics, or paleontology may substitute advanced courses in biology, chemistry, physics, or mathematics for some or all of the geology electives. Some proficiency in a foreign language is recommended for students anticipating graduate work in one of the earth sciences.

The senior capstone requirement in geology may be 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 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. Every semester. (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. Every semester. (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. Spring semester. (4 credits)

22 WATER RESOURCES

Analysis of the hydrologic cycle, including study of precipitation, runoff, evapotranspiration, infiltration, and groundwater flow. Physical and chemical properties of water. Water pollution studied from a scientific (rather than political) viewpoint. Problems of water management. Suggested for environmental studies major. Alternate years, next offered 1997–98. (4 credits)

23 NATURAL HISTORY OF THE NATIONAL PARKS

A survey of the natural history of selected U.S. national parks and monuments. Emphasis is placed on the geology and natural history of the individual parks, but other topics covered in the course are interdisciplinary in nature and include: the history and administration of the national park system, environmental issues, the archeology of certain parks, and park use, accessibility, and commercialization. One local field trip. Alternate years, next offered 1998–99. (4 credits)

25 ENVIRONMENTAL GEOLOGY

An introduction to the principles of environmental geology which is geology applied to the study of interaction between humans and the physical environment. Topics to be covered include hazardous earth processes, resource and waste management, effects and sources of acid rain, geologic aspects of environmental health, and others. The application of geologic information to the problem of solving conflicts and minimizing environmental damage will receive special emphasis. Students will be introduced to various aspects of geologic data collection. Local field trips. No prerequisites. Spring semester. (4 credits)

28 WORLD RESOURCES AND THE ENVIRONMENT

This course investigates the availability and origin of natural resources on this planet and the methods of recovery, and processing of these resources. Earth resources of concern will include soils,

Geology

petroleum, natural gas, coal, precious metals, non-metallic materials, gems, and water. Recovery and conservation of resources will be considered in a framework of political, economic, and environmental concerns on a global basis. Three field trips. Alternate years, next offered 1998–99. (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 fall 1998. (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. Fall 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 1997. (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. Recent topics courses include: The Geology of Iceland, The Geology of Southwestern United States, The Geology of Hawaii (these courses were followed by a two-week field trip to the concerned area). (4 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 spring 1998. (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 proceeded 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 1998. (4 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. (14 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***, Rachael Huener, Rachel May, David Sanford***, Linda Schulte-Sasse (Chair), Daniel Soneson, James von Geldern (Co-Chair for Russian)

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. (Information on the career paths of recent majors can be obtained from the Department.)

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

Students with the requisite language skills (completion of Intermediate German II or Intensive Intermediate German or the equivalent) may be admitted into Macalester's German Study Abroad Program, which includes a two-month term in Germany followed by a three-month semester of study at the Austro-American Institute in Vienna, Austria. Since 1969, up to 27 students have participated each year in the German study away program, open to non-majors as well as majors. (Information on the Macalester German Study Abroad

Program is provided by the Department and the Macalester International Center.)

The Tübingen Exchange

During the 1980–81 academic year, Macalester initiated a reciprocal exchange program with the University of Tübingen. 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, 22 and 25.

General Distribution Requirement

All courses in the German Studies department 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 and Gender Studies 55 or 88, Sociology 67.
 - 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 Elementary German II, to include German Studies 21 and 22 (or the equivalent), 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 Spring. (4 credits)

23 INTENSIVE INTERMEDIATE GERMAN CULTURE COMPONENT

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. Meets as the culture session of Intensive Intermediate German 25. Every Fall. (2 credits)

25 INTENSIVE INTERMEDIATE GERMAN

This course prepares students who have not yet completed intermediate German for participation in the Macalester German Study Abroad Program during the following January and Spring Semester. It is also suitable for students entering the program in German with advanced intermediate skills (i.e., students whose placement exam results indicate they fall between German Studies 21 and 22). It provides both intensive linguistic preparation and the cultural background necessary for students to derive maximal educational benefits from studying abroad. Prerequisite: Elementary German 12, or placement test, or consent of the instructor. Every Fall. (6 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 or 25, 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. Every semester. Prerequisite: German Studies 31, placement test, or permission of instructor. (4 credits)

50 TOPICS

Offered fall 1997: *The German Media Since World War II* (same as Communication Studies 50), taught in German. (4 credits); *Companion Seminar to The German Media Since World War II*, taught in German. (2 credits)

55 GERMAN CINEMA STUDIES

Changing topics in German film. Offered Fall 1997: Film and the Fantastic (Same as Humanities 50); and Spring 1998: Form and Gender in German and American Cinema. Other possible topics include: Cinema of the Weimar Republic; Nazi Cinema; Postwar German Cinema. Students may register up to two times for courses numbered 55, provided a different topic is offered. No prerequisites. Taught in English. (4 credits)

60 PROSEMINAR IN GERMAN STUDIES

Changing German Studies topics. Fall 1997: Friedrich Nietzsche, taught in English. Other possible topics: 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. Students may register up to three times for courses numbered 60, provided a different topic is offered. May be taught in German or in English. Every Fall and Spring. (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,

German Studies and Russian

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 1998. (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). Alternate years; taught in German. Next offered Fall 1997. (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 1998. (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 1999. (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. First offered Spring 1999. (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 INTERNSHIP

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, U.S. experts 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 for work as translators or interpreters, 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 the privilege of living in the Macalester Russian House, where daily 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. The Russian House is also used for departmental extra-curricular activities.

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 satisfy the general distribution requirement in the humanities.

Diversity Requirement

Russian courses 41, 55, 61, 62 and 65 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. Fall semester 1997. (4 credits)

12 ELEMENTARY RUSSIAN II

Continuation of Russian 11; further development of the same skills. Prerequisite, Russian 11 or consent of instructor. Spring semester 1998. (4 credits)

21 INTERMEDIATE RUSSIAN I

Continuation of Russian 12; further development of the same skills. Prerequisite, Russian 12 or consent of the instructor. Fall semester 1997. (4 credits)

22 INTERMEDIATE RUSSIAN II

Continuation of Russian 21; further development of the same skills; added emphasis on reading and discussing simple texts. Prerequisite, Russian 21 or consent of instructor. Spring semester 1998. (4 credits)

23 RUSSIAN CONVERSATION

Emphasis on everyday practical spoken Russian, communication situations, and topics that the student is most likely to experience. We recommend that this course be taken either after Russian 21 or after Russian 22 concurrently with Russian 31. Prerequisite, Russian 21 or consent of the instructor. Not offered 1997–98. (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. Fall semester 1997. (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. Prerequisite, Russian 31 or consent of instructor. Spring semester 1998. (4 credits)

33 ADVANCED RUSSIAN CONVERSATION

Everyday spoken Russian as well as discussion of more abstract topics. Prerequisite, Russian 31 or consent of instructor. Spring semester 1998. (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. Fall semester 1997. (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. Fall semester 1997. (2 credits)

50 TOPICS

The subject matter of this course will vary: departmental and interdisciplinary topics as diverse as Russian Modernist Poetry, Russian History through Russian Literature, and Soviet and East European film. A topics course scheduled for fall semester 1997 is: Russian Religious Experience (same as Religious Studies 50). 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. Fall semester 1997. (4 credits)

56 SOVIET MASS CULTURE

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 1998–99. (4 credits)

61 NINETEENTH CENTURY RUSSIAN LITERATURE IN TRANSLATION

An introduction to Russian literature: prose, poetry, drama, and literary criticism. Readings of authors, representative of the Golden Age of Russian poetry (Pushkin, Lermontov), the Age of the Realistic novel (Gogol, Turgenev, Dostoevsky, Tolstoy), as well as the late 19th century masters of the short story (Chekhov, Bunin). Russian drama is represented by Gogol, Ostrovsky, and Chekhov. Lectures, readings, and discussions in English; Russian majors may read some assignments in Russian. No prerequisites. Fall semester 1997. (4 credits)

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62 TWENTIETH CENTURY RUSSIAN LITERATURE 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. Spring semester 1998. (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. Spring semester. (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. The most recent topic has been "Russian Culture and the Natural Environment." 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. Spring semester 1998. (4 credits)

95 TUTORIAL: ADVANCED READINGS IN RUSSIAN LITERATURE

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: Didier Gondola, David Itzkowitz, Teresita Martínez-Vergne, Peter Rachleff (Chair), Emily Rosenberg, Norman Rosenberg, Paul Solon*, James Stewart, Yue-him 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 the women's and gender studies, urban 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 which meet the domestic diversity requirement are: 24, 31, 32, 42 and 49. The courses in the history department which meet the international diversity requirement are: 11, 14, 51, 52, 55, 58, 60, 62, 64, 65, 66, 67, 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 nine (36 credits) nor more than eleven (44 credits) history courses. The nine 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 nine courses but may be supplements to them up to a maximum total of eleven. 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 must take History 81-84, a foursemester sequence of one credit courses, during their Junior and Senior years. Students who are on approved study-away programs will be excused from this requirement during the semester(s) that they are studying off campus. All History majors must also 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 History 83 and 84 and 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 INTRODUCTION TO EUROPEAN HISTORY TO 1815

A one semester introduction to the study of European history prior to 1815 emphasizing selected major themes. Every year. (4 credits)

11 INTRODUCTION TO EUROPEAN HISTORY SINCE 1789

A one semester introduction to the study of European history since 1789 emphasizing selected major themes. Every year. (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. (4 credits)

16 EARLY SPANISH AMERICA

An introduction to the events, people and institutions that together constitute the encounter between Spain and America. We will explore some of the arenas in which Crown, settlers, African slaves, and indigenous populations acted, interacted and reacted: the landed estate; urban centers; mining towns; and religious hierarchies. We will also become acquainted with the different processes—political, economic, social and cultural—that culminated in the struggle for independence in the Spanish colonies in the New World. Every year. (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., millitary intervention in Central America). The tools used to understand the processes of one country can be readily applied to other areas. Every year. (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. Next offered Fall 1997 (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 1998. (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 1998. (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 1998–99. (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 1997. (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 1998–99. (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 1998–99. (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 1998–99. (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 & Gender Studies. Alternate years. Next offered 1998–99. (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 1988. (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 1998–99. (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 1998. (4 credits)

34 U.S. FOREIGN RELATIONS IN THE TWENTIETH CENTURY

This course covers American foreign relations from the 1890's to the present. It traces the evolution of government policy as well as the expansion of American foreign trade, investment, and mass communications. Every year. (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 1988. (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 1997 (4 credits)

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

This course probes in a thematic fashion the major developments that have given birth to the American society that we are all familiar with and puzzled by. Topics of concentration will include the evolution of political structures, the economy, and foreign policy; mechanization; urbanization; and the transformation of American 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 1998–99. (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 year. (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. (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. (4 credits)

48 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 1998–99. (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 1998–99. (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: African Labor History, The History and Fictions of War, American Frontiers and Environments, and The History of the Holocaust. (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 1997. (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 1998–99. (4 credits)

History

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 1998–99. (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 1998–99. (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 1997. (4 credits)

56 PRE-INDUSTRIAL EUROPE: CULTURAL TRADITION AND SOCIAL REALITY

A survey of the evolving relationship between European material conditions and cultural traditions from the fall of Rome to the beginnings of industrialization. This study will be conducted by inquiring into the sources and implications of such themes as the Arthurian legend and the Faustian myth as well as such cultural movements as the Renaissance and Enlightenment. Alternate years. Next offered 1998–99. (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 1998. (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 1998. (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 1998–99. (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 1998–99. (4 credits)

63 THE THOUGHT OF THE REFORMATION (Same as Religious Studies 46)

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. Alternate years. Next offered 1998–99. (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 1998–99. (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 spring 1998. (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 1998–99. (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 1998–99. (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 1997. (4 credits)

70 ROME (Same as Classics 70)

A study of the political, constitutional and social history of Rome from its beginnings to the disintegration of ancient civilization following its climax in the second century A.D. There will be emphasis on such large aspects of Roman history as the developments of the Roman constitutions, Rome's conquest of the Mediterranean from the time of the Punic Wars to 133 B.C., the last century of the Roman Republic and the causes of its fall, the establishment of the principate and the reasons for the decline of the Empire. Alternate years. Next offered 1998–99. (4 credits)

Intermediate Courses in Non-Western History (73–79)

73 POSTWAR JAPAN

A study of contemporary Japan from the end of the Pacific war in 1945 until the present. This course examines the occupation period and Japan's rise as a superpower through a study of economic and political organization and development as well as social and cultural movements during that period. The aim of the course is to aid the serious student of history to develop an analytic framework for understanding Japan today. Prerequisite, at least one previous history course. Alternate years. Next offered fall 1997. (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 1997. (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 1998. (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 1998. (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 1997. (4 credits)

Advanced Courses and Independent Studies (80–99)

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

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. (4 credits)

81 JUNIOR COLLOQUIUM

This weekly colloquium will bring together history majors and faculty members for topical and methodological presentations and discussions relevant to those specializing in history. Common readings will be assigned in advance. Topics will change from semester to semester, but the overall goal is to engage students broadly in some of the current topical and methodological concerns of our discipline. Required for all history majors in their junior year, unless they are on an approved studyaway program. Every Fall. (1 credit)

82 JUNIOR COLLOQUIUM

A continuation of History 81. Required for all history majors in their junior year, unless they are on an approved study-away program. Every Spring. (1 credit)

83 SENIOR COLLOQUIUM

A continuation of History 82, with special attention paid to the concerns of those currently doing advanced-level work in History 90 or in the Honors Program and those contemplating post-graduation plans. Required for all history majors in their senior year, unless they are on an approved study-away program. Every Fall (1 credit)

84 SENIOR COLLOOUIUM

A continuation of History 83. Required for all history majors in their senior year, unless they are on an approved study-away program. Every Spring. (1 credit)

90 SPECIAL ADVANCED STUDIES

Recent 90 courses have included 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. Next offered Spring 1998. (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

Andrew Overman (Director, Classics), Beth Cleary (Dramatic Arts and Dance), Françoise Denis (French), Giles Gamble (English), Birgitta Hammarberg (Russian)***, Jim Laine (Religion), Francesca Santoro L'hoir (Classics), Rachel May (Russian), David Chioni Moore (English/International Studies), Jeremiah Reedy (Classics), Norm Rosenberg (History), Virginia Schubert (French), Linda Schulte-Sasse (German Studies), Paul Solon (History)*, Clay Steinman (Communication Studies), Satoko Suzuki (Japanese)*, Joëlle Vitiello (French), Jim von Geldern (Russian), Robert Warde (English)***.

The humanities consist of the study of all that human beings have made and valued. Humanities courses thus confront the fundamental issues and ideas that recur in human history. The Macalester humanities program provides for the investigation of these subjects in the context of European culture from the Greeks to the present, through the combined study of literature, art, philosophy, architecture, music and history.

General Distribution Requirement

All courses in the humanities satisfy the requirement in humanities except 96 and 97.

Diversity Requirement

The courses in the humanities program which meet the international diversity requirement are numbered 21 and 22.

Core Concentration

(These courses are agreed upon by the student, the humanities director, and the instructor).

The humanities core consists of 12 courses. The inner core in humanities includes one course from antiquity (normally Classics 21 or 22). Five other courses constitute a core within the 12 course humanities program. Two

Humanities

courses should deal primarily with material from antiquity through the Renaissance, and another course from the modern world. A fourth course should be taken in a language department (such as *French 68: Art and Ideas of France* or *Russian 55: Russian Culture*), while the fifth and sixth courses of the inner humanities core should be drawn from contemporary studies.

Option A

There are a variety of options for students to pursue through the humanities core, some of which might be; Intellectual and Cultural History. Six courses with at least one from each of the following disciplines:

- * Art History
- * Music (Music 10 or advanced courses in history of music or music literature)
- * Communication Studies
- * Religious Studies (selected courses)
- * History (selected courses)
- * Language

Option B

Foreign language core concentration. Six courses in literature beyond the elementary and intermediate courses in a foreign language, normally excluding "conversation" courses.

Option C

English or Comparative Literature. Six courses in English literature, or literature in translation, chosen so as to make a meaningful pattern.

Minor Concentration

A minor in humanities shall consist of six courses. The first is the *Humanities 50: Introduction to Humanities and Cultural Studies*. Three other courses are to be drawn from Antiquity, the Medieval period, and the Modern world. The remaining two courses are from contemporary historical and cultural studies.

COURSES

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, next offered 1998–99. (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, next offered 1998–99. (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 1997. (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 1998–99. (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 1998–99.. (4 credits)

 $27\,\mathrm{THE}$ 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 1998-99. (4 credits)

50 TOPICS

For example: Eros and Thanatos; or Molière, Mozart, and Rembrandt. Topics courses for 1997–98 include: German Cinema Studies: Film and the Fantastic (same as German Studies 55), The Roman Empire, and Introduction to Humanities and Cultural Studies, an important critical introduction to the field of humanities and cultural studies. (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 1998–99. (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 minor. (4 credits)

The following courses are approved for use on a humanities core or minor:

Communication Studies 34, Cultural Studies and the Media

History 44, U.S. Since 1940

History 50, American Legal Cultures

History 90, Cold War U.S.

Russian 55, Russian Culture

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: Fabiola Franco (Spanish), Sherry Gray (International Studies), John Haiman (Linguistics), Birgitta Hammarberg (Russian)***, David Itzkowitz (History), Mahnaz Kousha (Sociology)***, James Laine (Religious Studies), David Moore (International Studies), Gerald Pitzl (Geography), David Blaney (Political Science)***, Joëlle Vitiello (French), Linda Schulte-Sasse (German

Studies), Vasant Sukhatme (Economics), Anne Sutherland (Anthropology), Robert Warde (English)***, Karen Warren (Philosophy), Gerald Webers (Geology), W. L. Wong (International Studies)

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.

Diversity Requirement:

The courses in international studies which meet the international diversity requirement are numbered 10, 11, 50, 65, 88, and 89.

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) INTL 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) INTL 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.

International Studies

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

50 TOPICS

Selected topics in globalization. Recent topics courses include: Culture and Globalization, and African Literature. (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 INTL 10 or 11, or the permission of the instructor.

88 SENIOR SEMINAR: THE UNIVERSAL, THE GLOBAL, AND THE WORLD

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 *Weltliteratur*, 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. Every fall. (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: INTL 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: INTL 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), Naoko Ikegami (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), 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

- 15 Intensive Elementary Japanese
- 31 Intermediate Japanese I
- 32 Intermediate Japanese II
- 35 Intensive Intermediate Japanese
- 50 Modern Japanese Literature in Translation
- 50 Modern Japanese Literature: Major Writers
- 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 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

Philosophy

37 Chinese and Japanese Philosophies

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: Naoko Ikegami, Ayako Kelly, Satoko Suzuki (Program Director)*

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 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)

15 INTENSIVE ELEMENTARY JAPANESE

This intensive course which combines Japanese 11 and 12 (the elementary one-year sequence in Japanese) provides serious students of Japanese the opportunity to progress quickly in their language studies so that they can develop enough proficiency to do some of their academic work in Japanese while they are still undergraduates. Fall semester. (8 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)

35 INTENSIVE INTERMEDIATE JAPANESE

Continuation of Japanese 15. This course combines Japanese 31 and 32 into one semester. Prerequisite: Japanese 15 or demonstration of appropriate proficiency. Spring semester. (8 credits) 50 TODICS

A topics course for 1997–1998 is Japanese Calligraphy. Fall 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), Anne Sutherland (Anthropology)

Deriving from Western and non-Western traditions, Latin America is defined by rich and complex historical processes, economic paths, political trajectories, and cultural developments. Because of the fascinating and difficult complexity that comes from a past of pre-Columbian ethnic groups and empires, centuries of colonial domination, the emergence of powerful contemporary national identities, Latin America now occupies the close attention of foreign governments, the business world, travelers, artists and writers, and academics.

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, Conversation; Spanish 52, Grammar Review and Writing; 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, Psychology, 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 shall 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. $(4\ \text{credits})$

97 INTERNSHIP

All internships require approval of the Director of the Legal Studies Program. Fall and spring semesters. (4 credits)

Courses in Affiliated Departments:

Communication Studies: 58 Legal Communication

History:

44 U.S. Since 1940

50 Special Topics in Legal History

50 The Rule of Law

90 Advanced Studies: Trials of the Century 96 Independent Study in Legal History

o independent study in Legal Histo

Philosophy:

25 Ethics

50 Special Topics in Philosophy and Law

50 Philosophy and the Rule of Law

73 Philosophy of Law

96 Independent Study in Philosophy and Law

Political Science:

50 Special Topics in Politics and 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

Psychology:

24 Behavior Disorders

50 Special Topics in Psychology and Law

96 Independent Study in Psychology and Law

Sociology:

33 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 (Linguistics), Roxane Gudeman (Psychology), Joy Laine (Philosophy), Roger Mosvick (Communication Studies), Charles Norman (English), 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.

Major Concentration

- 1. Ten foundation courses in linguistics, one of which must be Linguistics 87, Field Methods in Linguistics.
- 2. Five supporting courses from other departments: these may be cross-listed courses or courses from other departments (e.g. music) which the student determines, in consultation with his/her advisor, to be of particular relevance for the program of study the student has elected.
- 3. 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. Next offered fall 1997. (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 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

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

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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 INTRODUCTION TO 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. Prerequisite, Linguistics 24 or written consent of the instructor. Spring semester. (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*. Spring semester. (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 26, *Introduction to Syntax* and Linguistics 27, *Phonology*. Fall semester. (4 credits)

31 SPOKEN AND WRITTEN LANGUAGE

Although linguistic theory pays lip service to the notion that language is primarily spoken rather than written, the habits of the academy incline most scholars to rely on written data for their analyses. Elaborate theories are constructed on the basis of data which no one would actually utter.

This course is a hands-on exploration of the linguistic differences between speech and writing, with a focus on various forms of American English. In addition, by looking at other writing systems, the history of literacy, and the functions of writing within societies, we attain perspective on the posited differences between oral (non-literate) and literate societies and between oral and literate thought. Implications for educational practice are considered. Prerequisite, Linguistics 24, Introduction to Linguistics. Alternate years. Next offered 1998-99. (4 credits)

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. Next offered fall 1997. (4 credits)

35 LANGUAGE CHANGE (Same as English 35)

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. While a knowledge of some language(s) other than modern English is always an asset, the only prerequisite for this course is Linguistics 24, Introduction to Linguistics, or the instructor's signature. Next offered fall 1997. (4 credits)

36 SOCIOLINGUISTICS (Same as Sociology 36)

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 micro-

level study of language performances, dealing with gender, class, nationalism, regional and occupational matters as they relate to how people use language. Alternate years, next offered spring 1999. (4 credits)

49 THEORY AND CRITICISM OF RHETORIC (Same as Communication Studies 74)

A study of classical and modern theories of rhetoric, with major focus on theories and structures applicable to critical appraisal of spoken and written persuasion. Students will examine theories of selected writers from Aristotle to Kenneth Burke. They will apply principles of critical evaluation to historical and contemporary speeches, essays, novels and plays. Critical methods for studying leaders, movements and historical periods will be analyzed. Alternate spring semesters, next offered 1998–99.(4 credits)

50 TOPICS

Past offerings include: Bilingualism; Language and Alienation; Freedom, Speech and Action. (4 credits)

54 SYNTACTIC TYPOLOGY

Languages can resemble each other like dogs and wolves, because they share a common "ancestry"; but they can also resemble each other in functionally motivated respects, like porpoises and sharks, because they "live" in similar "environments". The typological study of languages focusses on nongenetic features of linguistic structure which can be used to categorize languages. (For example, both Chinese and English are "analytic" languages; both Turkish and Hua are "verb-final" languages; both Basque and Inuit are "ergative" languages.)

Typology yields two major insights. The first, is that typological features are not independent of each other: for example, in verb-final languages, auxiliary verbs follow the main verb, and so forth. The second is that for any conceptual category, the variety of structural means for its expression is extremely limited: although there are more than 5,000 languages spoken in the world today, there are only a handful of syntactic structures which they repeatedly employ to make conditional sentences. Both of these insights shed light on the structure of human language, and on human cognitive capacity in general. Prerequisities, Linguistics 24, Introduction to Linguistics, and two higher level courses. Next offered fall 1998. (4 credits)

56 ACOUSTIC 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

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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 1997. (4 credits)

72 PSYCHOLOGY OF LANGUAGE (Same as Psychology 72)

The human capacity to learn and use language is explored via a comparison of theories of acquisition, of linguistic knowledge, of social use, and of language production and comprehension. In the process, students are introduced to the perspectives and methodologies of language researchers from the specialties of developmental psychology, psycholinguistics, cognitive psychology and social psychology. Prerequisites, two psychology or linguistics classes or one of each, or permission of the instructor. Fall 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 a bilingual speaker of a language unknown to them, and attempt by means of elicitation and analysis of texts to understand its structure. Prerequisite, Linguistics 28, *Linguistic Analysis* or Linguistics 54, *Syntactic Typology*. 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)

Mathematics and Computer Science

Full Time Faculty: Karla Ballman, David Bressoud (Chair), Susan Fox, Thomas Halverson, Joan Hutchinson, Daniel Kaplan**, Brenda Kroschel, Richard Molnar, 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. 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.

Besides completing the college required Major Concentration Plan, each student wishing to major in the department is asked to complete a Departmental Major Plan that provides a personalized integrated plan of inclass and out-of-class departmental activities suited to that student's goals. This Plan becomes part of the student's file in the Department, a file designed to give a more comprehensive assessment of student development than is possible from course grades alone.

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 an active chapter of Pi Mu Epsilon, the national honor society for mathematicians.

Placement

All students who do not have credit (AP or not) in a calculus course are asked to take the mathematics self-assessment test included in the registration packet. It is also available at the Learning Center. Its purpose is to help in choosing the proper entry level mathematics and computer science course. 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 and who wish to pursue careers in the natural sciences, social sciences, or business and industry should consider the option of earning a math 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 math 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 11, 96 and 97. Mathematics 16 is especially appropriate for those students not needing specialized skills or training in mathematics.

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 53–59 and at least one numbered 70–79. The 70-level course must be taken at Macalester.
- 2. Computer Science 20 or 23 or an equivalent course.
- 3. All students wishing to major in mathematics must, as a capstone experience, write a senior paper. This paper will commonly be written in one of the courses numbered MATH 70–79. 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, 45, 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, and must include in their elective courses Math 44 (Applied Probability), Math 53 (Geometry), Math 56 (Algebraic Structures), and Math 57 (Analysis I).

Requirements for a major with a statistics emphasis are:

- 1. Computer Science 20 or 23 or equivalent. Mathematics 26, 27, 34, 36, 37, 44, 45, 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 53-59 and at least one numbered 70-79. The 70-level course must be taken at Macalester. It is recommended that students opting for a major with statistics emphasis take Mathematics 57 as their 50-level course and Mathematics 78 as their 70-level course.
- 2. All students wishing to major in mathematics with statistics emphasis must, as a capstone experience, write a senior paper. It is strongly recommended, although not required, that this paper be of a statistical nature. This paper will commonly be written in one of the courses numbered 70-79. It may, however, take the form of an honors paper or other independent work (most likely through the statistics consulting center) that has prior departmental approval. Students preparing for graduate work or for a career which makes heavy use of statistics are encouraged to become involved in the statistics consulting center.

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.

A mathematics core with statistics emphasis consists of a minor with statistics emphasis, plus 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 26 or 37, 27, 34, 36, 44, and 45. 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 which 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 45. 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 which 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.

11 PRECALCULUS

Polynomials and rational functions, equations and inequalities, systems of linear equations, trigonometric functions, identities, inverse functions, complex numbers. Mathematics 11 provides a thorough preparation in algebra and trigonometry, preparing the student for Mathematics 21; Mathematics 11 does not fulfill the general distribution requirement in natural science and mathematics and may not be taken by examination. Credit may not be earned in Mathematics 11 if credit for a mathematics course, numbered 21 or greater, has previously been successfully earned. Fall semester. (4 credits)

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

Mathematics and Computer Science

majors are encouraged to take Math 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)

21 CALCULUS

An intuitive treatment of the differential and integral calculus of one variable. Applications in the social, behavioral and physical sciences. Credit may not be earned in Mathematics 21 if credit for Mathematics 22 or Mathematics 37 has previously been successfully earned. Prerequisite, proficiency in algebra and trigonometry. 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. Prerequisites: Mathematics 21 or Mathematics 26 or permission of instructor. Every semester (4 credits)

34 APPLIED MULTIVARIATE STATISTICS

An introduction to multivariable 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, 1998. (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 MULTI-VARIABLE 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 non-linear techniques. Prerequisite, Mathematics 37. Spring semester. (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, 1998. (4 credits)

45 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, 1999. (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 1998. (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 23. Alternate spring semesters, next offered spring 1999. (4 credits)

50 TOPICS

Topics of interest to faculty and students such as optimization techniques and applications, linear programming, number theory, convexity in geometry, point set topology, modern applied algebra. Prerequisite, permission of the instructor. On an occasional basis. (4 credits)

53 MODERN GEOMETRY

The oldest and most famous way to prove that two regions have equal area is to dissect one and rearrange the pieces to form the other. This course will study the concept of dissection in both Euclidean and non-Euclidean contexts. The main reward will be a deeper understanding of the subtleties of the notion of area. We will also investigate the elementary solution to Hilbert's Third Problem: A tetrahedron is not congruent by dissection with a cube. Prerequisite, Mathematics 36. Alternate spring semesters, next offered spring 1998. (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. Fall semester. (4 credits)

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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 23 or the equivalent. Alternate spring semesters, next offered spring 1998. (4 credits)

68 APPLIED ANALYSIS

Ordinary and partial differential equations. Fourier series and integrals, boundary-value problems, special functions, coordinate transformations, vector analysis. Prerequisites, Mathematics 41. Alternate fall semesters, next offered fall 1997. (4 credits)

All 70-level courses will involve some independent student work such as oral presentations, papers, or computer projects.

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 1998. (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 spring semesters, next offered spring 1999. (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 59 and Computer Science 23. Alternate fall semesters, next offered fall 1998. (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 spring semesters, next offered spring 1998. (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 1999. (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 or 48, and Computer Science 23. Alternate fall semesters, next offered fall 1997. (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 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, geography, or cartography. Finally, students planning to major, core, or minor in computer science, or planning to take additional courses, should begin their studies with CS 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 62, 65, 70, 72, or 88:

Computer Science

- 48 Numerical Analysis
- 50 Topics in Computer Science
- 55 Operating Systems and Computer Architecture
- 57 Computer Graphics
- 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 wishing to major in computer science must, as a capstone experience, write a senior paper. This paper will commonly be written in one of the senior level courses. It may, however, take the form of an honors paper or other independent work that has prior departmental approval.
- 5. Mathematics 21, 22, and 26 as supporting courses. (Mathematics 26 should be completed as early as possible in the student's program.)

In addition, students are strongly encouraged to include some of the following mathematics courses as part of their program: Mathematics 36 (Linear Algebra), Mathematics 44 (Applied Probability), Mathematics 56 (Algebraic Structures), Mathematics 59 (Combinatorics), and a course in statistics chosen from either Mathematics 27 (Elementary Statistics) or Mathematics 45 (Mathematical Statistics). 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 an additional 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.

- 41 Introduction to Econometrics
- 75 Mathematical Economics

Linguistics

26 Introduction to Syntax

Music

53 Electronic Music

Philosophy

- 20 Introduction to Symbolic Logic
- 60 Philosophy of Science
- 61 Philosophy of Mathematics 80 Advanced Symbolic Logic

Physics

42 Electronics

Political Science

49 Science, Technology, and Politics

Psychology

- 31 Perception and the Senses
- 37 Cognitive Psychology

Religious Studies

- 58 Science and Religion
- 67 Technology and Ethics

Core Concentration

Requirements for a core concentration in computer science are:

Mathematics and Computer Science

- 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++, 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, object-oriented design, the theory of types, problem specification, formal specification theory, and will focus more formally on analysis of algorithms for efficiency and correctness. The course will include 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 1999. (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 1999. (4 credits)

57 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

Mathematics and Computer Science

discussed and used. Prerequisites: Computer Science 24 and either Mathematics 36, 37, or consent of instructor/. Alternate fall semesters, next offered fall 1998. (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 spring semesters, next offered spring 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 Al 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 1998. (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 1997. (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 1998. (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 59 and Computer Science 23. Alternate fall semesters, next offered fall 1998. (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)

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

An individual project planned and carried out under the supervision of a faculty member. Arrangements must be approved by the department prior to registration. (1–4 credit)

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 credit)

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 credit)

Music

Full Time Faculty: Donald Betts, J. Michele Edwards, Edouard Forner, Carleton Macy (Chair), Robert Morris

Part Time Faculty: Jan Gilbert, Peter Sowah Mensah

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), 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), David Whetstone (Sitar/East Indian improvisation).

The music department offers many opportunities for the general student and those interested in music as a concentration. All performing ensembles and all courses are open to majors and non-majors alike. Some courses carry prerequisites, however. 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 a lifelong enjoyment of music through the study of appropriate skills, repertoire, and performance practice.

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 Scottish Pipers and Dancers, and the Electric Guitar Ensemble. 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. The Concert Hall is the home of the *Macalester Trio*, an internationally recognized ensemble of artists in residence built around the piano trio format. The artists include Donald Betts and John Jensen, pianists, Michael Sobieski, violin, and Camilla Heller, cello.

Studio instruction in voice, piano, harpsichord, organ, guitar, all standard orchestral instruments, jazz improvisation, African drumming, and other nonwestern 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 \$260.00 (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 71, 72, 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 running concurrently with the first four semesters of fee waivered lessons in the primary performance area. Required skills include the ability to:

- * Sight-read a chorale.
- * Play basic chord progressions in various keys.
- * Play all scales.

This test (shown as Music 300) should be taken by the end of the third year.

Major Concentration

A major will consist of eleven academic courses, plus studio instruction, ensembles and piano proficiency. Upon deciding to become a Music Major, each student will create a "portfolio" which will contain a personal development plan and examples of work; the portfolio is the property of the student and will be kept in the adviser's office until graduation.

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:
 - * 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
 - * Three music electives

- * 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, 71, 72 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 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 (for vocal licensure students only)
 - * 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 or keyboardist
 - * (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 for students in the music education program.

Please see the Education Department listings for appropriate course requirements outside the Music Department.

Note that:

- * Education 51 provides the secondary school director with experience in applying teaching principles and procedures in elementary and secondary music instruction.
- * Music 71 and 72 should be taken by the third year.
- * 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 Professor Carleton Macy (MU 108) for further details.

Core Concentration

A core will consist of six music courses and six supporting courses plus the Piano Proficiency Exam.

Music 13 should be taken no later than the fall of the 3rd year. Core concentration includes:

- * Two theory courses from Music 13, 14, 23, 24.
- * Two literature courses from Music 42, 43, 44.
- * Two music electives.
- * 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*).
- * Six 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 seven courses plus studio instruction and ensemble participation, including:

- * 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.
- * Three elective music courses approved by the student's music department advisor.
- * 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; accompanying exercises in composition. Advanced 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. Subject matter will vary. (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 1999. (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 MUSIC OF BLACK AMERICANS: SPIRITUALS, BLUES, GOSPEL

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. Enrollment limited to 15. Alternate years, next offered fall 1997. (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 1997. (4 credits)

71 WOODWINDS AND PERCUSSION METHODS

Playing and arranging for woodwinds and percussion instruments. Class sessions will include practical instruction and discussion of most instruments in each instrumental 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 1997. (4 credits) Students may also register as follows:

71a Woodwind Methods, 2 credits or

71b Percussion Methods, 2 credits

NOTE: Students in the Music Education program must take the entire 4 credit package.

72 STRING AND BRASS METHODS

Playing and arranging for string and brass instruments. Class sessions will include practical instruction and discussion of most instruments in each instrumental 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 1998. (4 credits) Students may also register as follows:

72a String Methods, 2 credit or

72b Brass Methods, 2 credits

NOTE: Students in the Music Education program must take the entire 4 credit package.

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 spring 1998. (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. (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. (4 credits)

96 INDEPENDENT PROJECT

See the Independent Study section of this catalog. (4 credits)

97 INTERNSHIP

See the Independent Study section of this catalog. (4 credits)

98 PRECEPTORSHIP

See the Independent Study section of this catalog. (4 credits)

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 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 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

Electric Guitar Ensemble: The Electric Guitar Ensemble performs jazz and other musics. The ensemble includes bass and drums and often invites student instrumental 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; flamenco, flute, vocal, and saxophone ensembles are recent additions. (1 credit)

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 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

Group vocal instruction with special emphasis on the problems of teaching voice. Music education students will be given special assignments concerning instructional methods 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

Faculty: Lin Aanonsen (Director, Biology), Lynda LaBounty (Psychology), Jan Serie (Biology), Andrea Tilden (Biology)*, Eric Wiertelak (Psychology).

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: Cellular & Molecular 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

Neuroscience

Biology 62/Psychology 62: Cellular & Molecular Neuroscience

Biology 63/Psychology 63: Behavioral Neuroscience

(same as 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 Seminar in Endocrinology

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 62: Philosophy of Mind Philosophy 65: Biomedical Ethics Psychology 22: Drugs & Society Psychology 24: Behavior Disorders

Psychology 28: Developmental Psychology Psychology 31: Perception & 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. This requirement can be met by taking an approved Independent Project (Neur 96), an approved noncredit research experience at Macalester or at another institution or one of the following courses:

Biology 75: Research in Neuroscience

OR one of the following courses upon approval by the Program Director

Psychology 66: Directed Research
Biology 72: Research in Cell 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.

Biology 23 or 53: Genetics Biology 42: Animal Ecology Biology 51: Immunology Biology 57: Electron Microscopy

Biology 58: **Biochemistry**

Biology 64: Comparative Physiology

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 a 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 seniors; students must register for the course in both the fall and spring semesters. Prerequisites: Cellular and Molecular Neuroscience (Bio 62/Psych 62) and Behavioral Neuroscience (Bio 63/Psych 63) or permission of the instructor. Fall and spring semesters. (1 credit)

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, Karen J. Warren (Chair), 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 argument, applicable to all rational thought, and in the study of the methodology and basic concepts of all other academic disciplines. It 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 20, 35 (which meets the distribution requirement in social science), 39 and 67 and 80.

Diversity Requirement

The courses in the philosophy department that satisfy the international diversity requirement are those numbered 36, 37, 55, and 87.

Major Concentration

A major in philosophy consists of eight departmental courses which must include Philosophy 19 Critical Thinking, 20 Introduction to Symbolic Logic, 25 Ethics, 30 Ancient and Medieval Philosophies, 31 Modern Philosophy, 89 Senior Seminar, and either 62 Philosophy of Mind, 64 Philosophy of Language or 86 Wittgenstein Seminar. In addition, majors in philosophy are required to write a senior paper, normally the revised and extended version of a paper written for an advanced philosophy course and presented either to the senior seminar or some other audience. The department chair may waive requirements in exceptional circumstances.

A major in Asian philosophy consists of eight departmental courses which must include Philosophy 20 Introduction to Symbolic Logic (or 19 Critical Thinking), 25 Ethics, 31 Modern Philosophy, 36 Indian Philosophies, 37 Chinese and Japanese Philosophies, 87 Seminar: Asian Philosophy, and 89 Senior Seminar. Asian philosophy majors are encouraged to take supporting courses in Asian 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.

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: Philosophy courses in addition to 25 and either 15 or 31 could include 36 Indian Philosophies, 37 Chinese and Japanese Philosophies, 38 Philosophy of Religion or 62 Philosophy of Mind, 88 Seminar: Asian Philosophies, and supporting courses such as Anthropology 11 Cultural Anthropology, 56 Peoples and Cultures of South Asia; Dramatic Arts 68 Asian Theatres; History 14 Introduction to East Asian Civilization, 74 History of Traditional China, 76 History of Traditional Japan; Religious Studies 24 Introduction to Non-Western Religions, 33 Islam, 40 Religions of India or 41 Religions of East Asia; Art 76 Far Eastern Art; East Asian Studies 45 Living on the Edge: The Asian American Experience; other courses in the East Asian Studies program; or a study away program in India or Japan.

Political Philosophy: Philosophy courses in addition to 25 and either 15 or 31 could include Philosophy 24 Foundations of Political Theory, 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 20 Introduction to Symbolic Logic, 35 Philosophy of Psychology, 60 Philosophy of Science, 61 Philosophy of Mathematics, 62 Philosophy of Mind, or 64 Philosophy of Language, with supporting courses from Computer Science, Linguistics and Psychology.

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

Philosophy

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 skills involved in critical thinking: stating, clarifying, and assessing arguments (deductive and inductive), assumptions, definitions, implications, analogies, generalizations, predictions, causal claims, value claims, and observation statements. Topics include the study of arguments, formal and informal fallacies, syllogisms, and propositional logic as these occur in both everyday and philosophical contexts. The overall aim is to help students improve their reasoning skills. 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 prerequisites. Every year. (4 credits)

24 WESTERN POLITICAL THOUGHT

An examination of Western political theory and philosophy from the ancient Greek to the modern age. (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)

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. Every year, next offered fall 1997. (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. Prerequisite, Philosophy 19 or 20. 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 selected Hindu and Buddhist texts and philosophies. Every fall. (4 credits)

37 CHINESE AND JAPANESE PHILOSOPHIES

A study of selected Buddhist, Confucian and Taoist texts, including Japanese Buddhist works. Prerequisite, sophomore standing or Philosophy 36. Alternate years, next offered spring 1998. (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 spring 1999. (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)

50 TOPICS

A course not regularly offered. Recent offerings have been: Free Will and Human Action; Dangerous Speech; Philosophy of the Emotions; Hobbes, Locke, Rousseau; Philosophies of Black Experience; Freedom, Speech and Action. Topics courses are often offered to meet student interest in something not in the list of catalog courses. Courses offered in 1997–98 include Seminar: Friedrich Nietzsche, and Philosophy and the Rule of Law. (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, Marxist critics, Bultmann will be read and discussed. Every year, next offered fall 1997. (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 1997. (4 credits for each course, for a total of 8 credits)

60 PHILOSOPHY OF SCIENCE

An historical approach to philosophical problems of science. Topics include science versus pseudoscience, scientific explanation, theories of confirmation, and the realism/anti-realism debate concerning the interpretation of theories. Prerequisite, Philosophy 20 and some background in philosophy or permission of instructor. Alternate years, next offered spring 1998. (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 spring 1999. (4 credits)

62 PHILOSOPHY OF MIND

An analysis of western and non-western theories of the mind, the mental and the self. Topics will include traditional and contemporary studies of mind/body dualism, the mind/brain identity theory, minds and machines, other minds, disembodied existence and personal identity. Readings will range from the writings of Descartes, Locke and Hume to contemporary works such as those of Wittgenstein, Davidson, Dennett, and Parfit. Prerequisite, Philosophy 15, or 31 or permission of instructor. Alternate years, next offered fall 1998. (4 credits)

64 PHILOSOPHY OF LANGUAGE (Same as Linguistics 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; synonomy 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, Searle, Quine, Kripke, Davidson and Rorty. Prerequisites, Philosophy 20 and 31, or permission of instructor. Alternate years, next offered fall 1997. (4 credits)

Philosophy

65 BIOMEDICAL ETHICS

This course will be co-taught in the fall of 1997 by a philosopher and a primary care physician specializing in internal medicine. The course will use cases that arise in medical practice to develop a method of ethical inquiry. Some of the cases will be dramatic cases that set legal precedent, such as the Baby M case, but many of the cases will involve issues that arise in daily practice and touch on common ethical, legal, personal, and medical issues. Prerequisite, Philosophy 25. Alternate years, next offered fall 1997. (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 1998–99. (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 spring 1999. (4 credits)

80 ADVANCED SYMBOLIC LOGIC

A second course in symbolic logic designed to extend methods and pick up on issues coming out of Introduction to Symbolic Logic. Topics include second order logic and basic set theory, metatheoretic results (soundness, consistency, and completeness of first order logic), incompleteness of arithmetic, modal logic, and intuitionistic logic. Prerequisite: Philosophy 20 or permission of instructor. Alternate years, next offered fall 1998. (4 credits)

81 ADVANCED FEMINIST PHILOSOPHY

A course exploring issues in feminist theory and practice in philosophy, primarily in the areas of ethics, epistemology, political philosophy, and philosophy of science. Topics include: the nature of feminist theories and theorizing; feminist conceptions of reason, emotion, the body, the self, nature, equality, liberty, justice, knowledge, and ethics; feminist critiques of nonfeminist or mainstream Western philosophy. Prerequisite, permission of instructor. Alternate years, next offered spring 1998. (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, and permission of instructor. Alternate years, next offered fall 1998. (4 credits)

87 SEMINAR: ASIAN PHILOSOPHY

A study of the text and thought of a selection from Asian philosophy, in most years the *Bhagavad Gita*, leading to the writing and presentation of a seminar paper. Prerequisite, permission of the instructor. Every spring. (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. The course consists of two sections: one on "ethical theory"; the other on "analytic philosophy." The two sections meet jointly once a week to discuss topics of related interest. 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 spring. (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: Kenneth Andrews (Director), Vanessa Seljeskog (Chair), Tom Bell, Steve Hauser, John Hershey, Joel Kaden, John Leaney, Andy Manning, Morrey Nellis, Bob Pearson, Martin Peper, Bob Weiner

The department of physical education provides students the opportunity to certify in coaching, develop or improve skills in activity classes and/or compete in a wide range of recreational, intramural, club and intercollegiate sports.

The varsity athletic teams are members of the Minnesota Intercollegiate Athletic Conference (MIAC) and the National Collegiate Athletic Association, (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, karate, 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 requirements for coaching preparation are: Physical Education 51, 61, 71, 81, and Education 30.

Physical Education

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

| 131 Swimming I | 233 Swim for Fitness |
|-------------------|-----------------------------|
| 132 Aqua Aerobics | 234 Water Polo |
| 230 Scuba Diving | 333 Lifeguard Training |
| 231 Swimming II | 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 Skiing |
| 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 |
| 123 Badminton I | 224 Tennis II |
| 124 Tennis I | 243 Ballroom Dance II |
| 125 Weight Training | 246 Karate II |

126 Golf 127 Strength Training for Body Shaping 247 Fencing II 306 Yoga II

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: Jim Doyle, James Heyman, Sung Kyu Kim, Raymond Mikkelson (Chair), Kim Venn

The department of physics and astronomy offers courses that treat experimental, theoretical, philosophical and historical developments in the search to understand our physical universe. The department's curriculum is designed to provide the undergraduate physics preparation for advanced study and to develop the mathematical, logical and analytical skills that are important for many career choices.

Courses Primarily for Students Who are Not Science Majors

Physics 11, Contemporary Concepts, and Physics 13, Introduction to Modern Astronomy, are designed for students not majoring in the sciences.

Introductory Courses

The department offers a three-term sequence of general physics on which students may build advanced science studies: 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.

In addition, Physics 21-22 is a two-term sequence in introductory physics, which does not assume a working knowledge of calculus. It is 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 those numbered 50, 96 and 97 satisfy 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. It is particularly appropriate for students preparing for positions in technologically-oriented business and industry, as well as for those wishing to qualify for graduate study in physics, astronomy, engineering, medicine and related areas. The minimum requirements for a physics major include eight courses, 26, 27, 31, 43, 44, 61, an advanced laboratory experience (e.g., 53, 55, 96, or 97), and an elective in physics numbered above 31. 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 who are contemplating graduate study in physics, astronomy or closely related disciplines should also complete Physics 34, 42, 68 and 81 and mathematics at least through multi-variable calculus and differential equations. A reading knowledge of French, German or Russian is also desirable.

The senior capstone requirement in physics may be satisfied by an approved Advanced Laboratory experience or Independent Project .

Students expecting to complete a major concentration in physics are urged to make early contact with the department for assistance in planning course selections. A typical schedule for the first two years follows:

| rirst rear | | Sopnomore rear | |
|----------------|----------------|----------------|----------------|
| 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 |

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, psychophysics or similar fields. The requirements for a physics core consist of six courses in the department, of which at least one must be in modern physics, plus six additional courses normally from the area of the natural sciences and mathematics. Courses outside these areas may be selected with departmental approval. For the core concentration in physics the student should complete mathematics through calculus and be able to 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.

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.

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. (4 credits)

13 INTRODUCTION TO MODERN ASTRONOMY

This course discusses topics of current interest in astronomy, including the formation of the planets and the Solar system, properties and evolution of stars, peculiar stars such as black holes, characteristics of the Milky Way Galaxy, active and normal galaxies, distance determinations to galaxies, cosmological principles, the size and age of the Universe, and the large telescope and satellite observatories. A basic high school algebra and trigonometry background is recommended to fully appreciate the subject. No prerequisites. Fall semester (4 credits)

15 INTRODUCTORY ASTRONOMY LABORATORY

This laboratory course will provide active exercises in astronomical measurement methods, including telescope and other roof-top observations of the night sky (as weather permits). The course is appropriate for students who desire hands-on observing experience to complement Physics 13, Introduction to Modern Astronomy, or as background for advanced observing projects. Prerequisite: Knowledge of astronomy equivalent to concurrent registration in Physics 13 or consent of instructor. Fall semester. (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 15–July 10, 1998). (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 13–August 7, 1998). (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 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. Spring semester. (4 credits)

31 MODERN PHYSICS

Relativity, quantum theory, atomic structure, solid state, nuclear structure, elementary particles. The course is designed for students who desire a moderately sophisticated acquaintance with the foundations of modern physics. In addition to the theoretical treatment of the topics there will be laboratory exercises which recreate the spirit and excitement of the pioneering experiments. Minimum prerequisites: Physics 27 and concurrent registration in multi-variable Calculus. Three lectures, one two-hour laboratory per week. Fall semester. (4 credits)

34 OPTICS

Principles of optics and wave phenomena, including laboratory experience in basic optical experiments. Prerequisites: Physics 27 and a working knowledge of calculus. Three lectures and one three-hour laboratory per week. Spring semester. (4 credits)

42 ELECTRONICS

An introduction to the fundamentals of electric circuits, diodes, transistors and integrated circuits, with emphasis placed on their uses in power supplies, amplifiers, oscillators and digital circuits. Laboratory topics include an independent project. Prerequisite: Physics 27. Three lectures and one three-hour laboratory per week. Spring semester. (4 credits)

Physics and Astronomy

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. Prerequisites: Physics 27 and Mathematics 37. Three lectures per week. Fall semester. (4 credits)

44 ELECTROMAGNETIC THEORY II: MATERIAL MEDIA

This course treats the electromagnetic properties of matter, especially the solid state, and the properties of electromagnetic radiation and waves. Special emphasis is placed on boundary value problems and other useful calculational techniques. Prerequisite: Physics 43. 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*, Digital Electronics and a Current Issues in Physics Seminar. (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, optical and electrical characterization of thin films and semiconductor devices. A wide variety of general experimental techniques will be surveyed including vacuum technology, lockin detection, digital oscilloscope applications, signal-to-noise optimization, and data analysis techniques. Prerequisite: Physics 31 or Chemistry 56. Next offered fall 1999. (4 credits)

55 OPTICAL AND RESONANCE SPECTROSCOPY

This Advanced Laboratory course treats experimental techniques in visible, infrared, and magnetic-resonance spectroscopy to investigate electronic, vibrational and rotational transitions in molecules and spin excitations in protons. 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 34 or 42 or consent of the instructor. Two three-hour sessions/week. Fall term 1997 and 1998. (4 credits)

60 ASTROPHYSICS

This course covers advanced topics in astrophysics. Example topics include nucleosynthesis in stars and in the early Universe, radiative transfer in stellar atmospheres and the interstellar medium, properties of distant galaxies such as quasars, and cosmological issues such as the limitations in calculations of the size, expansion rate, history and fate of the Universe. In addition to classroom work, students will undertake individual research projects using the facilities of the Macalester Astronomy Laboratory and Observatory. Knowledge of material covered in Physics 13 and observing techniques covered in Physics 15 is assumed. Prerequisites: Physics 13 and Physics 31 or consent of the instructor. Spring semester. (5 credits)

61 MECHANICS

Particle dynamics, oscillations, the central force problem, conservative motion, moving coordinate systems, rigid body motion and Lagrange's equations of motion. Prerequisites: Physics 27 and mathematics through differential equations. Three lectures and problem discussions per week. Spring semester. (4 credits)

68 THERMAL PROPERTIES OF MATTER

The laws of thermodynamics, conditions for thermodynamic equilibrium and statistical mechanics are developed and applied to examples which illustrate thermal, electromagnetic and physical properties of gasses, liquids, and solids. Prerequisites: Physics 31 and Mathematics 37. Three lectures per week. Alternate years, next offered spring 1998. (4 credits)

81 QUANTUM MECHANICS

The concepts and techniques of non-relativistic quantum mechanics, developed and applied to example physical systems. 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)

96 INDEPENDENT PROJECT

Independent reading and experimentation by arrangement. Prerequisite: a written proposal must be approved by a faculty sponsor and the department chair prior to registration. (4 credits)

97 INTERNSHIE

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. (4 credits)

Political Science

Full Time Faculty: Franklin Adler (Chair), David Blaney***, Charles Green, Carol Horton***, Andrew Latham, Ahmed Samatar, Juliet Williams

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 three emphases: political theory and methods, public policy processes, and international/global 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 63 and 64.

Major Concentration

The normal requirements for a major concentration consist of nine courses:

(a) Three of the four Foundations courses (Political Science 20, 21, 24, 26). (Currently enrolled students may count Pol 10 as one Foundation course, but it is highly recommended that such students take three of the four listed Foundation courses).

- (b) a research methods course (Political Science 30), for which Math 14 or its equivalent is a prerequisite, and is strongly recommended for all majors.
- (c) three intermediate courses distributed across the three "emphases":
 - (i) theory and methods (courses numbered 31–39),
 - (ii) policy processes (courses numbered 40-49 and 51-59), and
 - (iii) international/global politics (courses numbered 60–69);
- (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 POLI 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 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 FOUNDATION 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 year. (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:

 $30~{\rm EMPIRICAL}$ 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 are devoted to *political theory and research methods*. They constitute one of the required emphases for 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 1997–98. (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 1999. (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 1997. (4 credits)

37 CONTEMPORARY POLITICAL THOUGHT

Analysis of twentieth century political thought, including critical, Marxist, existentialist, psychoanalytic, post-structuralist and feminist perspectives. 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 *policy processes* emphasis 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 1998–1999. (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 1998–1999. (4 credits)

50 TOPICS

Selected issues and special topics. (4 credits)

(Courses listed 51–59 are part of the required *policy processes* emphasis and one of the Foundation courses as a prerequisite.)

Political Science

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 constitute the required *international/global politics* emphasis and one of the Foundation courses as a prerequisite)

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 1998–99. (4 credits)

65 U.S. FOREIGN POLICY

Analysis of influence patterns in U.S. foreign policy-making and issues on the foreign policy agenda past and present. Prerequisite, Political Science 26 recommended. Every year. (4 credits)

66 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).

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 1998–99. (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 1998. (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 1999. (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 and at least one course from the 40s 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. Every year. (4 credits)

77 CONTEMPORARY LEGAL PROBLEMS

 $Advanced\ research\ in\ legal\ processes\ and\ problems.\ Prerequisite,\ either\ Political\ Science\ 56\ or\ 57.$ Alternate\ years, next\ offered\ 1998-1999.\ (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 1998–1999. (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 INTERNSHIP (limit of 2 toward major) (4 credits)

98 PRECEPTORSHIP (4 credits)

Psychology

Full Time Faculty: Salman Elbedour, Kathleen Harder, Colleen Kelley***, Lynda LaBounty, Jack Rossmann (Chair), Jaine Strauss*, Charles Torrey, Gerald Weiss, Eric Wiertelak

Part Time Faculty: Roxane Gudeman, John Kenny

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, social work, and clinical practice on an independent basis or in such agencies as mental health clinics and treatment centers for the mentally ill. Whether or not the student intends to continue her or his formal education in psychology, she/he encounters a broad course of study in which emphasis is placed upon the application of scientific method to the complex problems of human behavior.

The psychology curriculum is designed to provide access to a broad array of psychological information for students with general interests in the field and also to provide for majors an intensive common experience with the methods of investigation and conceptual analysis as well as the areas of application which are most characteristic of contemporary psychology. Laboratory activity, observation in non-laboratory environments, internships and independent projects supplement 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, 82), or topical (50, 88, 95–98). Psychology 26, 62 and 63 satisfy the natural science requirement.

Diversity Requirement

The course in psychology which satisfies the domestic diversity requirement is 38, Psychology of Pluralism.

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;
- * 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

- 31—Perception and the Senses
- 36—Principles of Learning and Behavior
- 37—Cognitive Psychology
- 63—Physiological Psychology

Group B

- 24—Behavior Disorders
- 25—Aging and Adult Development
- 28—Developmental Psychology
- 30—Personality
- 33—Individual Differences
- 39—Introduction to 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.
- * 66 Directed Research in Psychology;
- * Two courses at the advanced level.
- * 88 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, Psychology 49 or, in exceptional circumstances, an alternative course in statistics, 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 70s or 80s). Topics courses, and courses numbered in the 90s 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 anthropology, biology, computer science, linguistics, mathematics, philosophy, and sociology. Individual programs to meet special needs or interests may be discussed with members of the department.

COURSES

Introductory Courses

10 INTRODUCTION TO PSYCHOLOGY

An introduction to psychological thinking about problems and processes of behavior, 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. Fall and spring semesters. (4 credits)

Intermediate Courses

The introductory course, Psychology 10 is required for admission to most intermediate courses. 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;

Psychology

and drugs used in mental health. Classes will consist of a mixture of lecture, film, discussion, role plays, etc. No prerequisites. Next offered 1998–1999. (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 BEHAVIOR 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. Spring semester. (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. Prerequisite: Psychology 10. Fall 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, 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 exploration of techniques for assessing personality (e.g., dream analysis, projective tests) as well as changing it (e.g., psychoanalysis, Gestalt therapy). Recent contributions, criticisms, and research will be addressed. Spring semester. (4 credits)

31 PERCEPTION AND THE SENSES

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 (eg. psychophysical, physiological) and theoretical approaches (eg. constructivist, computational, ecological) in the study of sensation and perception. Spring semester. (4 credits)

32 BEHAVIOR MODIFICATION

An overview of the major concepts, methods and uses of behavior modification and behavior therapy. Treatment approaches to specific clinical and applied areas dealing with children and adults such as autism, classroom control, sexual dysfunction and alcoholism will be covered. In addition, an experience in self-behavior analysis and self-control technology is a continuing part of 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 1998–1999. (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 a women's and gender studies class, or permission of the instructor. Spring semester. (4 credits)

35 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 examines the systematic approaches that have been taken to study *leaming*, or how relatively enduring changes in behavior (or the mechanisms of behavior) emerge as a function of experience. The primary focus will be on animal research. Particular emphasis will also be placed on current applications of the principles and methodologies of classical and operant conditioning as the standard behavioral technology for biomedical and other research areas, such as behavioral neuroscience, developmental psychobiology, psychoneuroimmunology, and psychopharmacology. The laboratory component of the course will be used to introduce students to various behavioral techniques and for the design and completion of a research project. Prerequisite: Psychology 10. Spring semester. (5 credits)

37 COGNITIVE PSYCHOLOGY

A survey of the experimental analysis of the mind. Topics include memory and forgetting, problem solving, creativity, imagery, attention, reasoning, and learning of complex skills, including language. Special emphasis is given to the study of memory and thinking in everyday life. Frequent laboratory demonstrations. Prerequisite: Psychology 10 or permission of the instructor. Fall semester. (4 credits)

38 THE PSYCHOLOGY OF PLURALISM

The focus is 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) stereotypes and the perception of others as individuals or as group members; 3) social identity formation and change; 4) the psychology of prejudice and discrimination; 5) in-group/out-group relations; and 6) 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. Prerequisite: Psychology 10. Spring semester. (4 credits)

39 INTRODUCTION TO SOCIAL PSYCHOLOGY

Social psychology studies social phenomena from the vantage point of the individual. How others are affected by us and we by them is the focus. Sample topics of interest to social psychologists include love, aggression, conformity, attitudes, prejudice, persuasion, obedience, cooperation, and conflict resolution. Selected classic and current theories, experiments, observations, and events will be examined. Fall and spring semesters. (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 and Cross-listed Courses

Unless otherwise indicated, or unless departmental permission is granted to the student, courses numbered in the 50s do not count toward a major in psychology.

50 TOPICS

Examination of a topic of general interest from the viewpoint of behavioral science. Topics course offered: Child Abuse and Neglect. (4 credits)

Psychology

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. Fall semester. (5 credits)

63 PHYSIOLOGICAL PSYCHOLOGY (Same as Biology 63)

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. Spring semester. (5 credits)

Advanced Courses

Admission to any advanced course requires upperclass (junior or senior) status in addition to meeting the prerequisites listed for that course.

66 DIRECTED RESEARCH IN PSYCHOLOGY

Students are involved and guided in 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. Perequisites: Psychology 10, Psychology 49, and an intermediate course. Fall and spring semesters. (4 credits)

72 PSYCHOLOGY OF LANGUAGE (Same as Linguistics 72)

The human capacity to learn and use language is explored via a comparison of theories of acquisition, of linguistic knowledge, of social use, and of language production and comprehension. In the process, students are introduced to the perspectives and methodologies of language researchers from the specialties of developmental psychology, psycholinguistics, cognitive psychology and social psychology. Prerequisites: two psychology or linguistic classes or one of each, or permission of the instructor. Fall semester. (4 credits)

73 MOTIVATION

Motivation and related concepts (e.g., need, drive, desire, arousal, instinct, incentive, reinforcement, etc.) are examined in a variety of theoretical, experimental, physiological, and clinical contexts. Topics generally included, together with their associated emotional and cognitive states, are hunger, pleasure, pain, anxiety, aggression, achievement, power, and sex. Prerequisite: two intermediate courses. Spring semester. (4 credits)

74 CLINICAL AND COUNSELING PSYCHOLOGY

This course examines specific applications of psychological principles to the mental health field, including strategies for therapeutic intervention and techniques for assessment. 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. Next offered in 1998–1999. (4 credits)

75 PSYCHOLOGICAL MEASUREMENT

An overview of technical and methodological principles in test and attitude scale development; 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. Fall semester. (4 credits)

81 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. (4 credits)

Memon

This seminar will examine a series of topics about human memory and their implications for theories of memory, including: the distinction between conscious and unconscious forms of memory; memory disorders, both organic and psychogenic; autobiographical memory; social functions of memory; anomalies of memory such as deja vu and unintended plagiarism; and factors that potentially lead to the creation of false memories. Next offered in 1998–1999. (4 credits)

82 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. Next offered in 1998–1999. (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" (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. Prerequisites: Psychology 62 (Biology 62), Psychology 63 (Biology 63), junior or senior standing or permission of the instructor. Three discussion/lecture hours per week. Next offered in 1998–1999.(4 credits)

88 SEMINAR

Senior seminars examine a variety of topics. Open to junior and senior major and minor concentration students.

Behavioral Pharmacology

This course will provide an overview of the effects of psychoactive drugs on behavior. Topics will include basic methodology, drug classification, mechanisms of drug action, self-administration of drugs, microeconomics of drug related behavior and others. Although the primary emphasis will be on animal research, human behavioral pharmacology will also be included. Implications for public policy will also be addressed. Fall semester. (4 credits)

Pharmacology and Mechanisms of Pain and Addiction

This course will focus on the neural mechanisms and behaviors responsible for the perception of pain and the development of addictions. Particular emphasis will be given to the study of drugs and learned responses that impact upon these mechanisms in the central nervous system. While the primary focus will be the study of laboratory behavioral and neuropharmacological research, the class will also feature discussion of the recreational use and abuse of psychoactive substances in society. Perequisite: Psychology 62 (same as Biology 62) or Psychology 63 (same as Biology 63) or permission of the instructor. Spring semester. (4 credits)

Consciousness

The student will be guided into the literature and issues surrounding the concept and phenomena of consciousness. The course will focus on three interrelated parts: 1) philosophical analyses; 2)

Psychology

psychological theorizing; and 3) experimental research including topics such as hallucinations, daydreaming, sleep and dreams, split-brain phenomena, hypnotism, sensory deprivation, out-of-body experiences, introspection, drug effects, phantom limb, meditation, and the like. Several papers will be assigned including a literature survey in an area selected by the student. Prerequisite: permission of the instructor. Fall semester. (4 credits)

Psychology Goes to the Theater

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. Fall semester. (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: Instructor's signature and either Psychology 24 or Psychology 32. Fall semester. (5 credits)

Relationships and Identity in Human Development

In this seminar we will explore cultural variation in the journey from infancy to childhood to adulthood. Topics will include the physical and social environments of development, the structure and content of the relationships children experience, the evolution of emotion and personality, the types of cognitive, behavioral and social expertise acquired, and the emergence of individual and group identities in a social world that includes contrasting others. One sub-theme will be a comparison of cultures that stress independence and individuality to those that stress interdependence and the expression of self via relations to other individuals and groups. A second sub-theme will be the emergence and interplay of identities in a complex, multicultural society. Fall semester. (4 credits)

Freud

Freud, one of the three greatest theorists of the twentieth century (the others being Einstein and Bertrand Russell), was, for better or worse, a powerful influence on Western civilization and culture. We will study this man, his weaknesses and his contributions, his Viennese setting, and his impact. Freudian theory will be considered in depth. Biographical, critical, clinical, experimental, and social considerations will be entertained. Readings, lectures, and discussions will be supplemented by videos. Class participation will be required. Aside from some smaller papers and research, an extensive and scholarly final paper on Freud or some aspect of his work will be required. Spring semester. (4 credits)

Ecological Psychology

The ecological approach originated in James J. Gibson's efforts to describe the information contained in natural arrays of light and sound, and to show that such information specifies the layout, objects, and events of the world. The approach represents a radical departure from past or present "mainstream" theorizing about perception, and may have profound implications for psychology, implications extending well beyond the domain of perception. We will read, write about, and discuss Gibson's theory as it evolved up until his death in 1979, as well as examining some of its subsequent extensions into broader areas of cognition, action, and social behavior. Instructor's signature required. Spring semester. (4 credits)

Current Trends in Neuroscience

This seminar will investigate current thought and practice in neuroscience research through primary literature, discussion and class presentations. Next offered 1998–1999. (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, David Hopper**, James Laine, Anthony Pinn***, Calvin Roetzel (Chair), Dianne Stewart

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 and 63. The courses which satisfy the domestic diversity requirement are numbered 26, 27, 28, 33, 36, 37, 40, 41, 43, 52, 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. A "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. Fall semester. (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 Religion in America 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 1998–99. (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 spring semesters, next offered spring 1999. (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. Spring semester. (4 credits)

36 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

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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. Alternate years, next offered fall 1997. (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. Spring semester. (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. Next offered 1998–99. (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 1997–98. (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. Spring semester. (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. Alternate years, next offered spring 1998. (4 credits)

45 CULTURES IN CONFLICT: JEWS, CHRISTIANS, AND PAGANS IN CLASSICAL ANTIQUITY (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 Ioudaios* writers, the *Goyim* in the Mishna, and apologetic literature. Next offered fall 1997. (4 credits)

46 THE THOUGHT OF THE REFORMATION (Same as History 63)

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. Not offered 1997–98. (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 1997–98. (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 1997–98 will include Genesis, Black Christian Churches in the United States, Religion and Identity in America, The Russian Religious Experience, African-American Religions: Introduction to Non-Christian Traditions, Issues in African-American Religion, and Jewish-American Women. (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. Alternate years, next offered fall 1997. (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. Fall semester. (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 1997–98. (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). Alternate fall semesters, next offered fall 1997. (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. Every year, next offered spring 1998. (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 spring 1998. (4 credits)

$65\ \mathrm{THE}\ \mathrm{LETTERS}\ \mathrm{OF}\ \mathrm{PAUL}$

A study of the literary composition, form, function, context and theological concerns of one of the letters of Paul. The course will deal with the world of Paul and his readers, as well as the major

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emphases of Pauline scholarship in this century. Prerequisite: Religious Studies 20 or 21 or permission of the instructor. Enrollment limited. Alternate fall semesters, next offered fall 1997. (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 1997–98. (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).

The Russian, Central and East European Studies program seeks to impart to students a multidisciplinary knowledge of the geographical area encompassing Russia, Central and Eastern Europe. This body of knowledge includes language proficiency and knowledge of the history, culture and society of one or more countries of the region. The program is designed to meet student interest and demand for area expertise by an in-depth study of the region from a cross-disciplinary perspective. Every third year the RCEES program sponsors a Visiting International Faculty member greatly contributing to the RCEE program offerings. In addition, 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.

The major requires completion of 11 courses, one semester study abroad in one of the countries of the RCEE region, and completion of a capstone requirement. The capstone requirement may be fulfilled through an approved Honors Thesis sponsored by a RCEE faculty member, or enrollment in an RCEE approved senior seminar. Students must complete four semesters (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 (beyond the fourth semester) in their chosen language.

In addition to the language requirement, students are required to take seven elective courses. Four of the seven electives must be from RCEE approved courses in either the Social Science Division or the Humanities Division. In addition to the four courses in their chosen track, majors must take one course from outside their major track. The remaining two courses may be in either track. Language courses beyond the fourth semester will count towards fulfillment of the humanities track requirements. Majors must also fulfill their capstone requirement either through an approved thesis, sponsored by one of the participating faculty members, or through an interdisciplinary senior seminar on the RCEE region.

RCEE Approved Courses Regularly Offered On The Macalester Campus

Economics

- 25 Comparative Economic Systems
- 35 Economics of the Transition

Geography

45 Regional Geography of the Post Soviet Union

Histor

- 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

Russian

- 11, 12 Elementary Russian I, II
- 21, 22 Intermediate Russian I, II
- 23, 33 Conversation
- 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 Soviet Mass Culture
- 61 19th Century Russian Literature in Translation
- 62 20th Century Russian Literature in Translation

Additional Russian language courses subject to approval by Director of the RCEE program.

Sociology

Full Time Faculty: Terry Boychuk, Mahnaz Kousha***, Michal M. McCall, (Chair), Michael Obsatz

Part Time Faculty: Constance Gager, 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, 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, the legal studies program, and the international studies program. For details concerning these programs, consult the appropriate descriptions elsewhere in this catalog.

General Distribution Requirement

All courses in the sociology department satisfy the general distribution requirement in the social sciences except courses numbered 60 and above.

Diversity Requirement

Sociology 23 satisfies the domestic diversity requirement. Sociology 31 satisfies the international diversity requirement.

Major Concentration

A sociology major is planned in consultation with a member of the sociology department faculty and must include at least eight courses: Theories of Society (40), Quantitative Data Analysis (41), Qualitative Research Methods (42), Senior Seminar (88), and four electives, no more than two of which may be courses numbered below 40.

Majors are encouraged to take Theories of Society in their sophomore year, Quantitative Data Analysis and Qualitative Research Methods in their junior year, and the Senior Seminar during their senior year. Students who plan to do graduate work in sociology or some other discipline are encouraged to take Writing Sociology (87). The senior capstone requirement in sociology may be satisfied by taking the Senior Seminar (88) or Writing Sociology (87).

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 courses, including Theories of Society (40), either Quantitative Data Analysis (41) or Qualitative Research Methods (42), four sociology electives, and six complementary courses from outside the department.

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 and may not include off-campus credits, Tutorials (95), Independent Projects (96), Internships (97), or Preceptorships (98), nor more than two classes numbered below 40.

COURSES

Introductory Courses:

18 ISSUES AND PROBLEMS IN U.S. SOCIETY

This class links personal experiences within 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. Fall semester. (4 credits)

22 SUSTAINABLE AGRICULTURE AS A SOCIAL MOVEMENT

Sustainable Agriculture is a national and international movement whose goals are to define industrial agriculture as a social problem and to invent alternative, sustainable farming practices. We will consider the values underlying industrial and sustainable agriculture, the arguments made by advocates of sustainable agriculture—that industrial agriculture is environmentally, politically, economically and socially problematic—and the alternative practices they employ, including organic farming, farmers' markets, and Community Supported Agriculture. Spring semester. (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. Spring semester. (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 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. Spring semester. (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. Fall and spring semesters. (4 credits)

28 BUREAUCRACIES AND OTHER COMPLEX ORGANIZATIONS

Complex organizations are the distinctive characteristic of modern societies. People work in them, depend on them for services, and often feel pushed around by them. This course examines the major

Sociology

theories and research on organizational structure, behavior, control, and change. Special attention is given to communication, conflict, and leadership in complex organizations, and to the effects on them of changing technology. Alternate years, next offered 1998–99. (4 credits)

31 WOMEN AND MEN IN THE SOCIAL STRUCTURE

An historical and cross-cultural introduction to the social construction of gender, gender stratification, differences in the life cycles of women and men, and contemporary changes in women's and men's family and work roles. Ethnic, racial, class, and urban-rural differences in the positions of women and men in American society are emphasized. Fall semester. (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. Fall semester. (4 credits)

33 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. Spring semester. (4 credits)

34 SOCIAL STRATIFICATION

This course introduces students to theoretical and substantive issues in social stratification. Topics covered include social class analysis and the relationship between social class and other forms of social inequality such as gender, race and ethnicity. Particular attention will be given to these forms of inequality as they relate to the world of work. Dimensions of stratification are analyzed at the individual, institutional, national and international levels. Spring semester. (4 credits)

$35\ \mathrm{IMAGES}$ 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. Alternate years, next offered 1998–99. (4 credits)

36 SOCIOLINGUISTICS (Same as Linguistics 36)

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. Alternate years, next offered spring 1999. (4 credits)

Intermediate Courses.

40 THEORIES OF SOCIETY

Sociology draws from and contributes to a rich heritage of social thought. This course provides a comprehensive view of social theories by examining the fundamental questions and controversies pertaining to concepts of individuals and societies. It deals with methodological issues that derive from various theories. It imparts to the student a grasp of Sociology as a generalizing, abstract science. Prerequisite: at least one introductory level course. Fall and spring semesters. (4 credits)

41 QUANTITATIVE DATA ANALYSIS

This course introduces students to elementary principles of data analysis. It covers the uses of secondary sources of data like the General Social Survey, and includes learning how to access and format this kind of information using computer networks and "data banks". It instructs students in the skills of data presentation such as table building and interpretation, graphics, multivariant classifications and analysis, measures of association, and the logic of hypothesis testing. It also covers the application of computers to the analysis of textual materials, like fieldnotes, life histories, and interview transcripts. Prerequisite: Sociology 40. Fall and spring semesters. (4 credits)

42 QUALITATIVE RESEARCH METHODS

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. Fall and spring semesters. (4 credits)

50 TOPIC

Topics courses to be offered in 1997–1998 include: Comparative Health Care Systems and Sociology of the State. (4 credits)

Advanced Sociology Courses:

61 SOCIAL CHANGE

This course examines the nature of social change by exploring specific societies. Topics include social and political movements, world systems, colonialism and revolution. Attention will be given to the ways in which social institutions (especially economic and political institutions) are interconnected, and how their functions tend to have global effects. Prerequisites: Sociology 40, 41 and 42. Alternate years, next offered 1998–99. (4 credits)

63 SOCIOLOGY OF POVERTY AND WELFARE

What are the patterns of wealth and poverty in contemporary society? What are the structural sources of poverty and how are experiences of poverty shaped by race/ethnicity, gender and age? What is the institutional history of welfare in the United States? How does this institution help to maintain the political and economic status quo? By addressing such questions, participants in this seminar will engage in a systematic sociological analysis of poverty and welfare in the United States. Prerequisites: Sociology 40, 41 and 42. Alternate years, next offered 1997–98. (4 credits)

65 SOCIOLOGY OF KNOWLEDGE

This course examines the social construction of knowledge, the national, class, and gender ideologies built into codified knowledge, and the contemporary "politics of knowledge" which feminists, marxist historians, critical theorists of education, literary deconstructivists, Third World intellectuals, and others have constructed in recent years. Prerequisites: Sociology 40, 41 and 42. Alternate years, next offered spring 1998. (4 credits)

67 CRITICAL SOCIOLOGY

Critical sociology examines the relationship between values, social practice and sociological thinking. It includes an examination of modernist critical theories, the Frankfurt school, French postmodern critical theory, liberation theology, feminist critiques and critical pedagogy. Prerequisites: Sociology 40, 41 and 42. Alternate years, next offered spring 1999. (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. Focus will be on gender and the specific ways in which women have simultaneously adapted to change and resisted domination. Prerequisites: Sociology 40, 41 and 42. Alternate years, next offered 1997–98. (4 credits)

87 WRITING SOCIOLOGY

Students will work with a faculty member and one another to revise and edit a term paper from Theories of Society, Quantitative Data Analysis or Feminist Research Methods. The goal is to product publishable papers which will also serve as writing samples for graduate schools. Prerequisites: Sociology 40, 41 and 42. Fall semester. (2 credits).

88 SENIOR SEMINAR IN APPLIED SOCIOLOGY

In this class, majors 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 2-credit internship. Prerequisite: Sociology 40, 41, 42 and senior standing. Fall and spring semesters. (2 credits)

Sociology

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 Quantitative Data Analysis (41) and Qualitative Research Methods (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 Garciagodov, David Sunderland.

The mission of the Department of Spanish is threefold: (1) to teach language skills, (2) to refine critical thinking, and (3) to profile the Hispanic world.

(1) We expect that our students will graduate with strong proficiency in Spanish. The skills that define this proficiency are listening comprehension, including various dialects; speaking ability comprehensible to native speakers of Spanish; reading comprehension of texts written from various periods, and writing ability also comprehensible to native speakers of Spanish. (2) Our students should be able to approach a variety of texts and generate fruitful questions about and interpretations of them, informed by cultural and critical perspectives. They should be able to address questions with recognized methods of textual and historical analysis. (3) Our students should be conversant with broad issues concerning the hispanophone world. To ensure this, they take a number of courses that examine a broad range of cultural and historical patterns.

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 Spanish-speaking 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 of European Studies (IES) program in Spain provides for a broad range of study in Madrid. The University of 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

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 Bogotá, Colombia.

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.

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

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)

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 1997–98 are: Questions of Identity in Latin America; and The Family as History: The Stories of Latinos in the US. Recent topics courses: Avant-Garde in the Hispanic World: Spanish Plays: From Page to Stage: Art and Craft of Literary Translation; Don Quixote; Eroticism in Latin American Narrative; Peru and Ecuador: Literature of Subversion (1960–1990); Contemporary Mexican Woman'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 CONVERSATION

Conversational practice with special emphasis on aural-oral skills. A variety of reading material is assigned as preparation for class discussion. Videos, movies and audio tapes may also be assigned. This course requires a writing component. Prerequisite: 32 or consent of the instructor. Every semester. (4 credits)

52 GRAMMAR REVIEW AND WRITING

Developing writing skills through a close study of advanced grammar by means of compositions, letters, articles and creative writing. Oral skills are also emphasized. Prerequisite: 32 or consent of the instructor. 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 spring 1999. (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. Alternate spring semesters, next offered spring 1998. (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 1999. (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 1998. (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 1999. (4 credits)

Urban Studies

Chuck Green (Political Science), David Lanegran (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.

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 six courses 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

Economics

51 Intermediate Microeconomic Analysis

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

History

- 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

- 20 Foundations of U.S. Politics
- 30 Empirical Research Methods
- 42 Race, Ethnicity, and Politics
- 46 Urban Politics
- 74 Policy Analysis and Evaluation
- 77 Contemporary Legal Problems
- 88 Cities of the 21st Century

Sociology

- 23 Sociology of Race/Ethnicity
- 28 Bureaucracies and Other Complex Organizations

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

Faculty: Ann Braude (Religious Studies), Adrienne Christiansen (Communication Studies), Beth Cleary (Dramatic Arts and Dance), J. Michele Edwards (Music), Ruthann Godollei (Art)***, Duchess Harris (Women's and Gender Studies), Teresita Martínez-Vergne (History), Michal McCall (Sociology), Anna Meigs (Director, Anthropology), Emily Rosenberg (History), Sonita Sarker (Women's and Gender Studies and English), Jaine Strauss (Psychology)*, Joëlle Vitiello (French), and Karen Warren (Philosophy)

Faculty Associates: Ruth Burks (English)***, Antonio Dorca (Spanish)**, Jim Laine (Religious Studies), Mahnaz Kousha (Sociology)***, Karine Moe (Economics)*, Peter Rachleff (History), Norman Rosenberg (History), and Andrea Tilden (Biology)*

Adjunct Faculty: Francesca L'hoir (Classics), and Linnea Stenson (English)

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, 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. WGST 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 (WGST 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 (WGST 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 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

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cultural studies, and ranging from Mary Wollstonecraft to Cherrie Moraga. Alternate years, next offered in 1999–2000. (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. Topics courses to be taught in 1997–98 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 (WGST 25). Alternate years, next offered in 1998–99. (4 credits)

60 20TH CENTURY ANGLOPHONE WOMEN WRITERS (Same as English 59)

The focus of this course is on the works of women authors from India, England, Ireland, the Caribbean, and Western and Southern Africa, who write in English. We will study either an author and her particular context, or conduct a comparative and thematic study of a few authors. The goal of this course is to explore, in each case, how and why the writings address issues such as gender, language, power, the significance of writing as a profession, colonialism, nationalism, sexuality, and commercialism. Every year. (4 credits)

65 "EXILE" IN WOMEN'S WRITING AND FILM (Same as English 50)

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. Every year. (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 list in program office.)

- 21 American Voices
- 51 Contemporary Writing by Women
- 52 African American Writers of the U.S.
- 58 Film Studies
- 88 Seminar

French

45 The Existential Woman

77 French Women Writers

History

12 Women and Work in U.S. History

22 United States Women's and Gender History

26 Women in Latin America

44 U.S. Since 1940

Philosophy

25 Ethics (K. Warren)

29 Feminism and Environmental Ethics

81 Advanced Feminist Philosophy

Women's and Gender Studies

Religious Studies

42 Women in Judaism

52 Gender, Caste and Deity in India 60 Witches, Seers, and Saints

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

Economics

26 Economics of Gender

Education

58 Science as Culture

Political Science

88 Research Seminar: Liberalism and Feminism

34 Psychology of Gender

88 Seminar: Gender and Mental Health

Sociology 31 Women and Men in the Social Structure 35 Images of Women in the Middle East 73 Advanced Topics in Race/Ethnicity and Gender

Natural Science

Biology

17 Women, Health and Reproduction

50 Feminism, Science, and Society

Special Programs

Study Abroad and Domestic Off-Campus Programs

Macalester College has a long tradition of providing significant opportunities for students to build an international and intercultural perspective into their college education. One of these is the opportunity to study abroad. The College also sponsors a number of domestic off-campus programs which provide students with special study opportunities not normally available on campus.

Although there are limits to the number of students who are approved for offcampus study, in recent years demand has not reached the cap and Macalester has been able to support all qualified and well-prepared students who submit compelling proposals for off-campus study.

Under current policy, students may propose participation in off-campus study programs offered by Macalester, other colleges, universities, consortia, or other organizations around the world. To be eligible for Macalester approval, however, a program must be sponsored by an accredited, degree-granting U.S. college or university; by an officially recognized degree-granting institution within the indigenous educational system of its own country; or by a program which has a credit-granting relationship with Macalester.

All proposals for off-campus study are evaluated by the Study Away Review Committee, acting on behalf of the Faculty Curriculum Committee. The committee 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 curriculum at Macalester. The committee's endorsement must be obtained the semester before participation in a program is scheduled to begin.

Most study abroad and domestic off-campus program activities at Macalester are coordinated by the International Center.

Who May Participate?

Except as noted below, Macalester students in good academic standing are eligible to apply for approval to study off campus, but students must also meet the requirements of the individual programs. With the exception of January programs, students must normally have completed at least two semesters of residence at Macalester before they are eligible to apply for an off-campus program. They must also be enrolled on campus at the time application for off-campus study is made.

Transfer students who enter Macalester as second-semester sophomores may earn a maximum of one semester (or equivalent summer term) of credit for off-campus study. Those who enter Macalester as first-semester juniors are eligible for January programs only.

Students who are non-U.S. citizens are eligible for off-campus study, although financial aid will not apply to international program costs unless participation in the program is required and approved for a major which has been formally

Special Programs

declared. Non-U.S. citizens may apply up to one semester of financial aid to domestic off-campus programs for which they have been approved.

Adult Scholars or students on the Dependent Tuition Assistance Program are eligible for off-campus study but are responsible for the full cost of their programs as billed by sponsoring organizations. No special tuition rates apply.

Students on academic or social probation may file an application for participation in a program but must be off probation by the end of the semester prior to the beginning of the program.

Registration, Credits, Grades, and Financial Aid

Students whose proposals to study off campus are approved by the Study Away Review Committee register through the Registrar's Office for their programs and earn Macalester credit for successful completion of their approved academic program. With the exceptions noted above they may apply most of their Macalester financial aid (scholarships, grants, and loans) to program costs. Work-study contracts do not transfer off campus, but limited supplemental scholarship assistance may be available, including several small merit-based international scholarships and awards.

Credit from off-campus study meets general requirements for graduation. It may also meet certain distribution or departmental major requirements at the discretion of the individual departments concerned. In all cases, students must have the approval of their department chair, the Registrar, their academic advisor, and the Study Away Review Committee to earn off-campus credit.

Grades for off-campus study are recorded on students' transcripts, and grades are included in the calculation of cumulative grade point averages (GPA). Students should consult with the Registrar, the Director of the International Center, or the Study Away Advisor for information on credits and grades for specific programs.

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 program fee, as set 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 fees must be billed through Macalester.

Application Process

There are two steps in applying for study off campus: obtaining Macalester's endorsement of study plans and applying to a program. The two steps are independent of each other and have separate deadlines. Detailed information on both steps, as well as assistance with each, is available at the International Center.

Some off-campus program deadlines are a year prior to intended participation, deadlines are usually quite firm, and there are usually many details that need attention both in applying to and preparing for a program. Because of the careful planning that is needed and the critical timing involved, students are

advised to discuss both international and domestic off-campus study possibilities with the International Center as early as possible in their Macalester careers

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

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should also obtain a copy of the *Macalester College Pre-Medical Handbook* from an advisor or personnel in the Biology department office.

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 and either 22 or 23, Physics 21 and 22, or 26 and 27 and two courses in English. 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

John Schue (Adviser, Mathematics)

An arrangement between Macalester and Washington University at St. Louis makes it possible for a student to earn a B.A. degree from Macalester and a B.S. degree in engineering or applied science from Washington in five years—the first three to be spent at Macalester and the latter two at the School of Engineering and Applied Science at Washington. There is considerable flexibility in the program, but students should expect to take calculus through differential equations, computer programming, chemistry and physics at Macalester, as well as five or more courses in the areas of social science and humanities. Students are to complete 104 semester hours as well as all other graduation requirements.

An entirely similar program has been worked out with the University of Minnesota

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 $52\,\mathrm{Microbiology}$

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 (Psyc 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 104 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

Special Programs

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:

| 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— | 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 fifty organizations, and new ones are formed based on students 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 International Student Organization, I.S.O.; Mac Christian Fellowship; Mac Conservatives; Mac Jewish Organization; Mac Peace and Justice Coalition; the Women's Collective; MACTION, the community service organization; Unitarians; the Men's Issues Group; the Public Interest Research Group; Muslim Student Organization; Student Environmental Action Committee; and Springfest.

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, swimming, tennis, and track and field. Women compete in basketball, cross-country, golf, soccer, softball, swimming, tennis, track and field, and volleyball. Club sports currently include crew, cross-country skiing, 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 Campus Programs, Campus Grievance Procedures and the Mediation Process, Career Development Center, Chaplain, Community Service, Health Services (health education, medical, and psychological), New Student Orientation, Residential Life, Student Government, Media and Student Organizations. The Dean and Associate 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 Programs

The staff of Campus Programs works with students, faculty, and administrators 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. The Campus Programs staff is also responsible for the management of the Student Union. Located near the center of campus, it is one of the busiest places at Macalester.

Career Development Center

Molding 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, Alumni Mentor Program, senior newsletter, computer-accessible employment resources, collaborations with other colleges and campus offices (e.g. Multicultural Affairs, Academic Programs, Alumni),

Student Affairs

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 offices of the Chaplain. 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. The Community Service Office acts as a resource to these faculty members by providing information on the pedagogy of service-learning and assisting with community placements for students in the course.

Nearly 40% of Macalester students volunteer in some capacity during a given semester. Many students participate in community service as a co-curricular activity. The Community Service Office runs several programs that allow

students to volunteer with their peers, such as an English as a Second Language Program for area refugees and immigrants, and an International Speaker's Program that sends international students and students who have studied internationally into local schools to expose children to other cultures. Other groups of students volunteer with Habitat for Humanity and at local schools and after school programs for children. In addition, the office develops relationships with local non-profit organizations that utilize volunteers. A clearinghouse maintained in the office provides information on over 300 diverse community agencies where students can provide service. The Community Service Office provides counsel to MACTION, the student service group, as they plan and implement their numerous one-time service events throughout the year.

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. 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 (8-10 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.

Student Affairs

Staff. The staff of Macalester Health Services includes licensed psychologists, a licensed clinical social worker, a certified chemical dependency practitioner, 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. 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.

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.

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 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. The Highlander, located in the Student Union, provides meals and snacks throughout the day and is a popular programming space during the evenings and on weekends.

Academic Services

Computing

Computing and Information Technology coordinates the development of computer, network and telephone resources at Macalester. In its academic support role, it develops and maintains computing resources that enhance faculty and student productivity in addition to providing those resources necessary to support instructional activities across all departments.

The College is committed to providing student access to microcomputers, both in microcomputer clusters and through its resale program. 70 microcomputers are available for unrestricted general student use. Approximately 280 computers are also available for student use through departmental facilities dedicated to specific instructional objectives. To encourage student ownership of microcomputers the College has a microcomputer resale program.

The College has nearly completed a high-speed campuswide local area network. All academic and administrative buildings are fully networked, and effectively all devices within those buildings are included. All permanent residence halls are networked with one data outlet per pillow. The campus network links microcomputers to essential services (e.g. file servers, print servers, the Macalester Web, etc.), to our own minicomputers, and to the Internet.

Instructional activities are supported on microcomputers (Macintosh and Windows) and on the College's central computer, the AlphaServer 2000. Classrooms with microcomputers support a variety of academic applications. Programs like Mathematica, Common LISP, Pascal, MicroTSP, JMP, Stella II, Aldus Freehand and Superpaint in addition to a variety of word processing, spreadsheet and utility programs are commonly available in departmental computing classrooms. A system of Novell Netware servers provides access to these and other programs throughout campus in offices, classrooms and dormitory rooms. From these microcomputers, the campus also has access to other resources both on campus (e.g. the Alpha and the CLICnet library

Academic Services

catalog) and beyond campus through the Internet. The Alpha supports a number of computer languages and software packages which provide students and faculty with a wide range of research and teaching tools. The Alpha also provides services such as electronic mail, USENET newsgroups and the World Wide Web

In addition to public computing facilities, Macalester provides a variety of computing resources in the form of discipline-specific laboratories associated with various departments. For example, Psychology has several small clusters of Macintoshes and PCs to aid students in quantitative methods as well as cognition. Biology also has one teaching classroom and a number of smaller computer clusters to help students visualize and experiment with ideas presented in class. Economics has a Macintosh-based teaching classroom designed to give students mastery of statistics and mathematical tools. One of the laboratories in the Physics department is equipped with microcomputers to permit real-time experimentation. And of course, the computer science program supports two labs of Macintoshes and UNIX systems to aid in the instruction of programming languages and theory. Off-campus users can explore Macalester's resources and programs on the World Wide Web at this URL: http://www.macalester.edu.

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. Areas covered are mathematics, biology, chemistry, writing, reading for speed and comprehension, general vocabulary development, general learning skills and time management, among others. Group and individual assistance is available from teachers serving the departments of biology, chemistry, mathematics, English, and linguistics and who function as counselors in those fields. Student tutors are available in the same fields. Assistance is also available to students preparing for graduate school examinations, graduate school applications, capstone papers, honors projects, competition for scholarships and studyabroad opportunities. The Learning Center is especially eager to work one-to-one with students who have 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 almost two million volumes. In addition, the library offers a full range of online indexes and fulltext articles and over 50

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 105 hours per week and remains open until midnight five days per week.

Media Services and the Humanities Resource Center provide educational media technology in 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 the library and media services will be found on our web pages at www.macalester.edu/~library and www.macalester.edu/library/about/mediaser.html.

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.

The Office of Multicultural Affairs

The Office of Multicultural Affairs was established to augment College services for Native American, African-American, Hispanic, and Asian-American students. To that end the Office of Multicultural Affairs works with academic departments, administrative offices, and areas of students services to provide cultural, social, and academic programs for students of color and the College as a whole.

The program offers a range of activities, services, and programs that are designed to encourage the students' academic success, and to make their stay at Macalester a comfortable and rewarding experience. One example of what the Office of Multicultural Affairs offers is the Multicultural Advisors Program, otherwise known as M.A.P. M.A.P. assists new students of color in their adjustment to the College via mentoring. It is staffed by up to ten upperclass

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students of color who have made the transition to Macalester. Group activities and discussion sessions are led by M.A.P. advisors, Office of Multicultural Affairs staff, other Macalester faculty, staff, alumni, and Twin Cities community members. The program is supervised by an Office of Multicultural Affairs Program Coordinator.

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 should seek available assistance and make their needs known to the Coordinator of Disability Services whose office is 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

Anstice T. Abbott (1962). Established by the national Wood's School Alumnae Association for an elementary education major. Principal, \$11,420.

Roy C. Abbott (1958). Established by the former treasurer of the Reader's Digest Association, Inc. Principal, \$2,500.

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.

William R. Adams (1959). Established by William R. Adams, president of St. Regis Paper Company. Principal, \$5,000.

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.

Horace M. Albright (1961). Established by Horace M. Albright, nationally known conservationist and former director of National Park Service. Principal, \$5,000.

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, \$51,674.

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, \$31,134.

American Cyanamid Company (1962). Established by the American Cyanamid Company. For upperclassmen who are taking a premedical course in preparation for entrance to a medical school. Principal, \$50,000.

American Friends of the Middle East (1963). Established by American Friends of the Middle East for a student attending Macalester from a Middle Eastern country. Principal, \$7,500.

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.

Anonymous Individual (1968). Established to honor Lila and DeWitt Wallace. Principal, \$5,000.

Anonymous Donor (1986). Established anonymously for students needing financial assistance. Principal, \$12.050.

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.

Clarence D. Baker—Dr. James Wallace (1958). Established by Harry D. Baker, president of the Baker Land and Title Company of St. Croix Falls, Wisconsin, in memory of his brother, Clarence D. Baker, Class of 1898, and of Macalester's fifth president, Dr. James Wallace. To be paid twice annually, when most needed by beneficiaries, to deserving rural students with satisfactory scholastic records and outstanding reputation for industry and integrity, and who show determination to make their own expenses as far as possible. Principal, \$12,500.

George F. Baker Trust (1967). Established by the George F. Baker Trust of New York City. For young men and women of the highest overall promise. Principal, \$250,000.

Baldwin Paper Company (1963). Established by the Baldwin Paper Company of New York City. Principal, \$14,000.

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, \$39,970.

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, \$98,469.

William Benton (1957). Established by the chairman of the board of Encyclopedia Britannica and former United States Senator and Assistant Secretary of State. For students of unusual ability who plan a career in government. Principal, \$26,000.

Frank Stanley Beveridge (1958). Established by the Frank Stanley Beveridge Foundation in memory of the founder of Stanley Home Products, Westfield, Massachusetts. Principal, \$5,000.

Frank M. Bitetto (1964). Established by Frank M. Bitetto, Thunder Hill Drive, Stamford, Connecticut. Principal, \$2,500.

Douglas M. Black (1959). Established by Douglas M. Black of Doubleday & Company, Inc., book publishers, New York City. Principal, \$6,000.

Eugene R. Black (1959). Established by the former president of the International Bank for Reconstruction and Development, Washington, D.C. Principal, \$3,250.

Frederick O. Bohen (1959). Established by the chairman of the Meredith Publishing Company, Des Moines, Iowa, publishers of Better Homes and Gardens and Successful Farming. Principal, \$5,000.

Boise Cascade Mando (1959). Established by Minnesota and Ontario Paper Company, predecessor of Boise Cascade. To be awarded with preference to students from International Falls, Minnesota and Fort Frances and Kenora, Ontario. Principal, \$6,000.

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.

Leonard B. Brabec (1978). Established by the estate of Glenn E. Pangborn in memory of Leonard B. Brabec, Class of 1918. Awarded to chemistry majors. Principal, \$3,000.

Maude Fielding Brashares (1963). Established by Mrs. Brashares through a bequest in her will for academically able students who are in financial need. Principal, \$9,155.

Kenneth and Jane McMillin Breckner Endowed Scholarship (1983). Established by Mr. Breckner, Class of 1938, in honor of his wife, Jane McMillin, founder of the Wilson School in St. Louis. Awarded to a student of good moral character from a middle income family, who without financial assistance could not afford a private liberal arts education. Principal, \$33,308.

Lee H. Bristol Memorial (1962). Established by the former chairman of the board of Bristol-Myers Company. Principal, \$13,695.

Charles H. Brower (1963). Established by the chairman of the board of Batten, Barton, Durstine and Osborn, Inc. Principal, \$10,500.

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.

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, \$15,975.

Burlington Northern Foundation (1967). Established by the Northern Pacific Railway Company of St. Paul. Principal, \$25,000.

Ezra J. Camp (1970). Established by colleagues and friends in memory of Dr. Camp, professor and chairman of mathematics (1939-70). Principal, \$4,940.

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.

 ${\it Cass \ Canfield \ (1965)}. \ Established \ by the former \ chairman \ of \ Harper \& \ Row, \ New \ York \ City. \ Principal, $5,000.$

George E. Carlson (1964). Established by Robert W. Carlson, president of the Minnesota Rubber Company, in honor of his father. For a 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, \$27,996.

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

Bennet Cerf (1959). Established by the chairman of Random House, New York City. For a student majoring in English literature. Principal, \$14,500.

George Champion (1964). Established by the chairman of the board of Chase Manhattan Bank, New York City. Principal, \$7,000.

Chemical Bank (1967). Established by the Chemical Bank of New York City. Principal, \$25,000.

Colby Mitchell Chester (1958). Established by the chairman of the board of General Foods Corporation, New York City. Principal, \$11,809.

Christian Service Scholarship (1953). In memory of Gertruida Niemeyer, established by her daughters, Gertrude and Joanne, and her son Reinder in memory of their mother, who immigrated to the United States from Holland. Preference is given a student from the Merriam Park Presbyterian Church, St. Paul, who is planning to enter Christian service sponsored by the church. Principal, \$4,880.

Church Vocation Scholarship of Merriam Lexington Presbyterian Church (1963). Established by the congregation of the Merriam Park Presbyterian Church, St. Paul. For students who wish to prepare for a church vocation. Principal. \$10,259.

Blake Clark (1963). Established by Mr. Clark, Capitol Car Distributors, Ltd., Takoma Park, Maryland. Principal, \$5,000.

Glenn Clark (1963). Established by friends and alumni in memory of Professor Clark, chairman of the English department and track coach at Macalester (1912-44). Principal, \$10,290.

Class of 1910 (1967). Established by Miss Ann Elizabeth Taylor. For children of United Presbyterian ministers whose income is less than the median salary of all Presbyterian ministers at the time. Principal, \$6,000.

Class of 1927 (1957). Established by members of the Macalester Class of 1927. Principal \$6,190.

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, \$10,900.

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, \$2,939.

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.

 $Homer\ P.\ Cochran\ (1963).$ Established by the senior vice president of the Morgan Guaranty Trust Co., New York City. Principal, \$10,000.

William Rogers Coe (1967). Established by the New York financier for a student interested in American studies. Principal, \$12,500.

 $\it H.W.~Coffin~(1926)$. Established by Mrs. Mary E. Coffin, Duluth, Minnesota. For a student who is a relative of the H.W. Coffin family, or is from the Glen Avon Presbyterian Church, Duluth, preparing for the ministry or missionary work, in the order named. Principal, \$2,500.

A.L. Cole (1957). Established by the vice pmresident and director of the Reader's Digest Association, Inc. Principal. \$36.000.

Colgate-Palmolive Company (1967). Established by the Colgate-Palmolive Company, New York City, for male students who plan a business career. Principal. \$12.500.

John C. Comelius (1958). Established by the Minneapolis advertising executive and former president of the American Heritage Foundation. Principal, \$5,700.

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.

Ira L. Crawford (1903). Established by his brothers and sisters in memory of Ira L. Crawford, a pioneer of Rock County, Minnesota. Principal, \$2,500.

Charles A. Dana (1962). Established by the industrialist. Awarded only to students in the upper three classes of the College. Principal, \$50,000.

Victoria David Memorial (1960). Dr. David, orthopedic surgeon, Houston, Texas, Macalester Class of 1913. Principal, \$26,000.

May Davie (1968). Established by Mrs. Preston Davie of New York City. Principal, \$4,916.

George W. Davis Scholarship Fund in Religion (1959). Established by DeWitt Wallace in honor of George W. Davis. Awarded to students with good academic records who need special financial help to attend Macalester. Principal, \$8,091.

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, \$25,535.

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.

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, \$29,500

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.

Ruth and Althea Diether Endowed Scholarship Fund (1976). Established by the Althea Diether testamentary bequest. Principal, \$13,360.

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.

The Dorothy and Marjorie Domberg Endowed Scholarship (1981). Established by Dorothy Dornberg, Class of 1918, through life income gifts in memory of her sister, Marjorie, Class of 1920, and in honor of their long years of close contact with Macalester College. Principal, \$5,393.

Albert Dome (1964). Established by the president of the Famous Artist Schools, Inc., Westport, Connecticut, and New York City. Principal, \$12,034.

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, \$16,254.

Colonel and Mrs. Edward P.F. Eagan (1964). Established by Colonel and Mrs. Eagan of New York. Colonel Eagan, an attorney, was head of the People-to-People Sports Committee, Inc. Principal, \$12.500.

Frederick H. Ecker (1958). Established by the president and chairman of the Metropolitan Life Insurance Company. Principal, \$6,500.

Charles Edison (1957). Established by the former governor of New Jersey, former Secretary of the Navy, and son of the inventor Thomas Edison. For student of unusual promise interested in a career in science. Principal, \$19,500.

Charles W. Eisenmenger (1959). Established through a bequest in the will of Charles W. Eisenmenger, St. Paul businessman. Principal, \$10,000.

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.

Ettinger Foundation, New York City (1961). Established by the Ettinger Foundation. Principal, \$5,000.

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.

First Presbyterian Church of Lake Crystal, Minnesota (1960). Established by the Presbyterian Church of Lake Crystal with money received from the R.G. James estate. Principal, \$3,150.

Raoul H. Fleischmann (1959). Established by the president and chairman of The New Yorker. Principal, \$10,000.

Arthur S. 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, \$17,708.

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, \$49,990.

Henry N. Flynt (1967). Established by Mr. Flynt, an attorney from Greenwich, Connecticut. Principal, \$12,500

Edythe B. Follett (1958). Established by the Follett College Book Company of Chicago, in honor of the wife of the company's founder. Principal, \$7,755.

 $\it D.\ Fraad,\ Jr.\ (1959).$ Established by the chairman of the board of Allied Maintenance Corporation, New York City. Principal, \$8,000.

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, \$183,745.

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, \$23,903.

Wilfred Funk (1957). Established by Mr. Funk, New York City book and magazine publisher, for a student of unusual ability. Principal, \$10,000.

General Electric Foundation (1966). Established by the General Electric Foundation for students majoring in chemistry. Principal, \$40,000.

General Foods Fund, Inc. (1962). Established by the manufacturers of cereals and packaged foods. Principal, \$25,000.

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, \$47,000.

Robert B. Gile-Middle East (1963). Established by Mr. Gile and the directors of the American Friends of the Middle East for a student attending Macalester from a Middle Eastern country. Principal, \$10,000.

Robert and Jean Gilruth (1964). Established by Dr. Robert R. Gilruth, head of the Manned Space Center, who was responsible for selecting and training astronauts for Project Mercury. To assist a student majoring in the physical sciences or one working on a special science project. Principal, \$5,000.

Bernard F. Gimbel (1963). Established by the chairman of the board of Gimbel Brothers, Inc., New York City. Principal, \$25,200.

Samuel Goldwyn (1962). Established by the chairman of the board, Samuel Goldwyn Productions, Inc. Principal, \$10,000.

Grace Presbyterian Church (1961). Established by the Women's Association of Grace Presbyterian Church of Minneapolis and George P. Leonard of California. Principal, \$2,850.

Grace Presbyterian Church, Winona, Minnesota (1931). Established by the First Presbyterian Church of Winona to be awarded to a candidate nominated by Grace Presbyterian Church. Principal, \$1,000.

Theodore Granik (1962). Established by the founder and director of "American Forum of the Air." Principal, \$14,000.

William T. Grant (1956). Established by the chain store executive of New York City. For a student of outstanding academic achievement. Principal, \$20,000.

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, \$110,100.

Arthur E. Griffiths (1960). Established by Mr. Griffiths, Candlewood Isle, Connecticut, and Sarasota, Florida. Principal, \$15,400.

Ruth and Fred Guinzburg (1961). Established by Mr. and Mrs. Guinzburg, New York City. Principal, \$5,000.

Dr. Douglas L. Guy '49 Memorial (1965). Established by James Todd Guy, attorney at law, Milwaukee, Wisconsin, Class of 1908, in memory of his son, Class of 1949. Principal, \$5,000.

James Guy (1960). Established by James Todd Guy, attorney at law, Milwaukee, Wisconsin, Class of 1908, in memory of his father, who was a member of the College staff at the turn of the century. Principal, \$2,500.

J.H. (Mo.) (1959). From an anonymous donor in Missouri. Principal, \$48,000.

Edith A. Haigh Endowed Scholarship (1982). The Edith A. Haigh Endowed Scholarship was established through a deferred gift by Miss Haigh, Class of 1915, and by gifts from her sister, Marion E. Haigh, Class of 1921. Principal, \$47,025.

John P. Hall (1961). Established by Dr. L. Margaret Johnson, Class of 1921, in memory of Professor Hall, registrar and professor of Greek (1897-1945), baseball coach, and men's Glee Club director. Principal, \$7,113.

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 \$13,725.

Charles Hattauer (1958). Established by the New York dental surgeon. Principal, \$8,000.

Mr. and Mrs. Wendell O. Hawkins (1966). Established by Mr. and Mrs. Hawkins, Minneapolis. Principal, \$4.761.

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.

 $\label{eq: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, $10,029.$

Henry H. Henley, Jr. (1967). Established by Cluett, Peabody Co., Inc., of New York to honor their president. Principal, \$10,500.

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.

Oveta Culp Hobby (1964). Established by the president and editor of the Houston Texas Post. Principal, \$11,000.

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.

Marvin J. Hofius (1961). Established by an anonymous donor, friends, and alumni in memory of Marvin Hofius, Class of 1957. Principal, \$5,928.

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, \$16.698.

Arthur Bristow Hood (1962). Established by family and friends in memory of the vice president of Ralph L. Smith Lumber Company, Class of 1916. Principal, \$3,945.

Warren C. Hunter, Jr. (1958). Established by Dr. Warren C. Hunter of Portland, Oregon, in memory of his son, Warren, Class of 1952. For a student who has genuine interest in public affairs, majoring in social sciences with emphasis in political science. Principal. \$10.954.

IBM (1965). Established by International Business Machines Corporation, to be awarded to students majoring in mathematics. Principal, \$40,000.

Dr. and Mrs. Kano Ikeda (1960). Established by Dr. Charles W. Jarvis, Class of 1942, St. Paul physician, in memory if Kano Ikeda, M.D., chief pathologist at the Charles T. Miller Hospital and member of the Macalester faculty. For a student majoring in medical technology. Principal, \$4,539.

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

Isabelle Howard Jensen (1980). Established by Howard Jensen in memory of his wife, Isabelle Howard Jensen, Class of 1916. Principal, \$9,765.

Esther Jerabek (1980). Established by a bequest from Esther Jerabek, Class of 1918. Principal, \$13,288.

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, \$21,515.

Howard Johnson (1958). Established by the chain restaurant executive of New York City. Principal, \$65,600

Julia M. Johnson (1959). Established by DeWitt Wallace in memory of Mrs. Julia M. Johnson, first woman professor at Macalester (English literature, 1898-1935) and first dean of women. Principal, \$8.215.

Eric Johnston (1958). Established by the motion picture executive. Principal, \$17,500.

Howard A. Johnston (1963). Established by the former president of Marlin-Rockwell Corporation, Jamestown, New York. Principal, \$7,700.

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, \$17,181.

Mary Frances Johnstone Kagin Memorial (1966). Established by her husband, Dr. Edwin Kagin, relatives, and friends. To be awarded to a student planning a full-time church vocation, for use during the sophomore year. Principal, \$16,424.

Henry J. Kaiser Family Foundation (1959). Established by the Henry J. Kaiser Family Foundation of Oakland, California, and named for the industrialist and builder. For a premedical student who qualifies on the basis of ability, character, and financial need. Principal, \$20,000.

Robert J. Keith Memorial (1973). Established by the Pillsbury Company, Minneapolis, in memory of its late chairman and chief executive officer. Mr. Keith was a member of the Macalester College Board of Trustees. Principal. \$25,000.

Dr. William H. Kendall (1960). Established by Dr. Kendall, a clergyman of Florissant, Missouri, Class of 1904. Principal, \$2,500.

Susan E. Kennedy Memorial (1971). Established by family, fellow students, and other friends in memory of Susan Kennedy, a sophomore at Macalester at the time of her death, with preference given to a premedical student. Principal, \$4,000.

Mildred Phillips Kindy (1967). Established by Miss Ann Elizabeth Taylor, Class of 1910, in memory of her classmate. For students specializing in piano or voice. Principal, \$533.

David N. Kingery Memorial (1964). Established by family, former students and other friends of David Newton Kingery, who served Macalester as professor of science (1896), registrar (1897-1912), and professor of mathematics and astronomy (1906-38). Principal, \$11,227.

James R. Kirby (1960). Established by Mr. Kirby, educator from Casper, Wyoming, Class of 1951. Principal, \$6,700.

Timothy Kirk Memorial (1969). Established by his parents, Mr. and Mrs. Wayne Kirk, Edina, Minnesota, classmates, and other friends in memory of Timothy Kirk, a member of the Class of 1968. Principal, \$5.078.

Julius Klein (1959). Established by the consultant of Latin American governments and former United States Secretary of Commerce. Principal, \$5,000.

Walter Knott (1964). Established by the founder of Knott's Berry Farm and Ghost Town, Buena Park, California. Principal, \$20,000.

Rebecca Kees Laird (1981). Given by Thomas Kees Laird, Class of 1916, in memory of his mother. Principal, \$6,500.

Edward Lamb (1964). Established by Mr. Lamb, Toledo Ohio, lawyer and business executive. Principal, \$77,363.

Thomas S. Lamont (1963). Established by Mr. Lamont, a director of the Morgan Guaranty Trust Company. Principal, \$10,000.

Den E. Lane and Elsie J. Lane (1977). Established by Elsie J. Lane. For upperclass students majoring in religion, economics and business education, and all areas of the liberal arts. Principal, \$720,313.

Mary Woodard Lasker (1964). Established by Mrs. Albert D. Lasker of New York City. Principal, \$13,500.

Justus Baldwin Lawrence (1964). Established by the chairman of the International Fact Finding Institute, New York City, as a memorial to his wife, Mary Peace Lawrence. Principal, \$10,235.

Catharine Deaver Lealtad Endowed Scholarship (1983). Established for needy students by Dr. Lealtad, Class of 1915, the first black woman graduate of the College. Principal, \$36,745.

Robert Lehman (1964). Established by Robert Lehman of Lehman Brothers, New York City. Principal, \$10,000.

Bany T. Leithead (1963). Established by the president of Cluett, Peabody & Company, Inc., New York City. Principal, \$13,000.

George P. Leonard (1960). Established by Mrs. George P. Leonard, Class of 1927, Stinson Beach California, in honor of her husband. Principal, \$33,255.

Mrs. William H. Leonard (1959). Established by Mr. and Mrs. George P. Leonard, Class of 1927, Stinson Beach, California, in memory of Mr. Leonard's mother. Principal, \$16,725.

Wilma F. Leonard (1958). Established by George P. Leonard, Class of 1927, Stinson Beach, California, in honor of his wife. Principal, \$41,563.

Hobart and Edith Lewis (1960). Established by Mr. and Mrs. Hobart Lewis of Katonah, New York. Principal, \$7,000.

Edmund W. and Doris E. Lienke (1966). Established by Edmund Lienke, Class of 1938, and his wife. To be awarded to a junior or senior majoring in business or economics with special consideration to anyone interested in the field of life insurance. Principal, \$6,100.

Walter A. Lienke (1961). Established by his bequest and supplemented by the members of his family and friends. To be awarded to a student majoring in music. Principal, \$9,560.

Ina E. Lindsley (1980). Established by Ina E. Lindsley, Class of 1911, to be awarded annually to a junior or senior who will contribute to world betterment. Principal, \$5,214.

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, \$22,000.

E. H. Little (1958). Established by the former chairman of the Colgate-Palmolive Company, New York City. Principal, \$13,500.

P. Lorillard Company (1963). Established by the New York tobacco manufacturers. Principal, \$36,000.

Samuel E. Lowe (1965). Established by Paul Lyle, executive vice president, Western Printing and Lithographing Company, Racine, Wisconsin. Principal, \$7,060.

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 Club of New York (1967). Established by alumni with priority use for students from the East Coast. Principal, \$12,137.

Macalester Endowed Scholarship Fund. Established by friends of Macalester College in memory of Minnie C. Hoffman by her sister, Mrs. Edwin C. Johnson and in memory of Mr. and Mrs. Howard F. Ware from the estate of Clara M. Ware. Principal, \$2,000.

Macalester-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, \$16,713.

Roswell Magill (1958). Established by the president of the Tax Foundation, partner in the New York law firm of Cravath, Swaine and Moore and former Under Secretary of the Treasury. Principal, \$5,000.

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.

Marsh & McLennan (1967). Established by the New York City insurance brokers. Principal, \$10,000.

Edward Everett McCabe (1920). Established through a bequest in the will of Mr. McCabe, Class of 1914, who was a lieutenant in the U.S. Aviation Corps, World War I, and the first Macalester alumnus to leave a legacy to the College. Principal, \$2,500.

 $\label{thm:model} \textit{Anne Wunderlich McClure} \ (1965). \ Established \ by \ George \ P. \ and \ Wilma \ Fox \ Leonard \ of the San Francisco \ area. \ Principal, \$269,365.$

Jessie E. McClure (1980). Established by Ethel McClure in memory of her sister, Jessie McClure, Class of 1916. Principal, \$5,000.

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, \$\frac{411500}{211500}\$

The McKnight Foundation Minority Scholarship (1975). Established by the Foundation for Black, Spanish-speaking, or Native American students. Principal, \$310,183.

Norman H. McRae and Loren R. Jestus Endowed Scholarship (1957). Established by alumni, family and friends in memory of Norman H. McRae, who was superintendent of buildings and grounds at Macalester (1924-43), and then founded Multi-Clean Products, Inc., manufacturers of floor and building maintenance equipment, and in memory of Norman's son-in-law, Loren R. Jestus, Class of 1940. Principal, \$10,710.

Mead Corporation (1965). Established by the Mead Corporation, Dayton, Ohio. Principal, \$10,000.

Merriam Lexington Presbyterian Church (1926). Established by members of the St. Paul church. For two students, nominated by the church, who aspire to careers in religious work. Principal, \$3,871.

Charles E. Merrill Trust (1980). Established by The Charles E. Merrill Trust. To be awarded to qualified, but needy, community-college graduates. Principal, \$25,000.

Agnes E. Meyer (1965). Established by Mrs. Meyer, Washington, D.C. Principal, \$9,000.

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.

James A. Michener (1968). Established by the author. Principal, \$5,000.

Jeremiah Milbank (1962). Established by Mr. Milbank, a New York City corporation executive. Principal, \$26,000.

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.

 ${\it Mobil}~(1967).~Established~by~Mobil~Oil~Corporation~to~be~awarded~to~promising~upper class students~interested~in~pursuing~chemistry,~physics~or~business~as~a~career.~Principal,~\$25,000.$

Lois and James Monahan (1958). Roving editors of the Reader's Digest. Mrs. Monahan writes under the name Lois Mattox Miller. Principal, \$8,500.

Moore-Middle East (1963). Established by Mrs. Allan Q. Moore and the directors of the American Friends of the Middle East, for a student attending Macalester from a Middle Eastern country. Principal, \$16,666.

Malcolm Muir (1962). Established by Mr. Muir, a director of Newsweek magazine. Principal, \$5,000.

James Mulvey Memorial (1922). Established by the Misses Jessie and Edna Mulvey in memory of their father, James Mulvey, a lumberman. For a student committed to a full-time church service. Principal, \$12.500.

Carl Bertram Myers (1921). Established by S.F. Myers of St. Paul in memory of his son. Principal, \$2,500.

Kathryn Jo Neily Memorial (1963). Established by Mr. and Mrs. Joseph E. Neily in memory of their daughter, who died during her freshman year at Macalester. Principal, \$50,273.

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, \$59,554.

Niemeyer (1966). Established by Gertrude Niemeyer, a St. Paul schoolteacher, in memory of her mother Gertruida. Principal, \$6,849.

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, \$27,000.

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.

Ema O'Gordon Endowed Scholarship (1989). Established by Clarence O'Gordon, Class of 1913, in honor of his wife, Ema O'Gordon. To be awarded annually to students in need of financial aid. Principal, \$79,216.

Spencer T. Olin (1964). Established by Mr. Olin, member of the board of directors of Olin Mathieson Chemical Corporation, New York City. Principal, \$2,500.

Ordway Family (1958). Established by John G. and Richard Ordway of St. Paul. Principal, \$15,000.

Alex F. Osborn (1958). Established by the advertising executive and chairman of the Creative Education Foundation, Buffalo, New York. Principal, \$2,500.

Ella M. Osborne (1958). Established through a bequest in the will of Mrs. Edwin W. Osborne of St. Paul, wife of the former chief fire and insurance inspector of the Northern Pacific Railroad. Principal, \$2.800.

 $\label{eq:continuous} \textit{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, \$15,764.

 $\it William S. Paley (1967)$. Established by the chairman of the board of the Columbia Broadcasting System. Principal, \$5,000.

Georgiana P. Palmer (1968). Established by friends and colleagues of Georgiana P. Palmer, for thirty-seven years professor of classical languages and Russian at Macalester College. Preference is given to students majoring in these languages. Principal, \$\$3,846.

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.

Carlo M. Paterno Foundation (1967). Established by Mr. Paterno, North Salem, New York. Principal, \$5,000.

Dr. and Mrs. Robert Lee Patterson, Jr. (1967). Established by Dr. and Mrs. Patterson, New York City. Principal, \$10,067.

 $\label{eq:peace_power_power} \textit{Peavey Company Foundation} \ (1966). \ \textit{Established by the Minneapolis-based grain firm}. \ \textit{Principal}, \ \$25.000.$

Milo R. Perkins (1960). Established by Mr. Perkins, foreign investment consultant, Tucson, Arizona. Principal, \$13,500.

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.

Ward Pratt (1977). Established in 1977 in memory of Ward Pratt by his wife and children, Elsie I. Pratt, Linda Pratt Owen, Class of 1962, and Dr. James W. Pratt, Class of 1966. Principal, \$476.

Presbyterian Church Endowed Scholarship Fund: Synod (1931). Established by Presbyterian churches in the Synod of Minnesota. Principal, \$2,300.

David C. Primrose (1956). Established by his family, friends, and former students in memory of Professor David C. Primrose, track coach at Macalester (1926-54). For a junior man who participates in intercollegiate activities and who has leadership ability and satisfactory academic standing. Principal,

Samuel F. Pryor (1965). Established by the vice president of Pan American Airways. Principal, \$5,000.

Eugene C. Pulliam (1958). Established by the Indiana and Arizona newspaper publishers. Principal, \$38,100.

Samuel Wesley Raudenbush Memorial (1956). Established by Mrs. Alma M. Raudenbush as a memorial to her husband and awarded to a protestant woman junior music major. Principal, \$5,000.

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.

Stanley Resor (1958). Established by the chairman of the board of J. Walter Thompson Company, advertising agency, New York City. Principal, \$5,050.

Rexall Drug Company (1962). Established by the drug store chain. Principal, \$5,000.

Charles A. Rheinstrom (1967). Established by the vice president of J. Walter Thompson Company, advertising agency, New York City. Principal, \$7,800.

Bryan McDonald Rice (1961). Established by Macalester president (1958-68) and Mrs. Harvey M. Rice and friends in memory of their son, who died in his freshman year at Macalester. Principal, \$43,050.

Miriam Ritter Endowed Scholarship Fund (1996). Established by Miriam 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. Principal, \$100,780.

William E. Robinson (1960). Established by the chairman of the board of the Coca-Cola Company, New York City. Principal, \$5,000.

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.

George W. Romney (1961). Established by the former governor of Michigan and Secretary of Housing and Urban Development. Principal, \$5,100.

Rotary Club of St. Louis Park (1964). Established by the Rotary Club of St. Louis Park, Minnesota, with preference given to students who are residents of St. Louis Park. Principal, \$5,746.

Stephen W. Royce (1957). Established by Mr. Royce, president of the Pasadena-Sheraton Corporation of California. For a student of unusual promise. Principal, \$14,200.

Harry J. Rudick (1958). Established by the New York University professor of law and partner in the New York City law firm of Lord, Day & Lord. Principal, \$13,750.

The St. Paul Companies, Inc. (1976). For students with scholastic promise who without financial assistance could not afford a private, liberal arts education. Principal, \$50,000.

St. Paul Presbytery (1931). Established by the Presbytery. For a student nominated by the Presbytery. Principal, \$2,500.

Sara Lee Corporation (formerly Consolidated Foods Corporation) (1967). Established by the New York food processing and distributing company. Principal, \$25,000.

Mr. and Mrs. Plato E. Sargent (1965). Established by Plato E. Sargent, Class of 1915, and Mrs. Sargent for students seeking to enter vocations in the Presbyterian Church. Principal, \$12,789.

David Samoff (1959). Established by the Radio Corporation of America in honor of its chairman of the board. Principal, \$25,000.

Harry Scherman (1961). Established by the founder of the Book-of-the-Month Club. Principal, \$16,000.

Max Schuster (1961). Established by Mr. Schuster, co-founder of Simon and Schuster, Inc., New York City. Principal, \$7,500.

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, \$23,325.

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.

Thomas Shaw (1931). Established by Professor Shaw, who was a member of the Board of Trustees (1891-1918) and president of the Board (1901-19). For a student nominated by the Central Presbyterian Church of St. Paul. Principal, \$3,044.

Chester H. Shiflett (1966). Established by former students and friends to honor Professor Shiflett on his retirement as professor of chemistry (1929-

1966). To be awarded to a student majoring in chemistry. Principal, \$27,086.

H.B. Silliman (1915). Established by H. B. Silliman of Cohoes, New York. Principal, \$2,500.

Frank M. Smith (1958). Established by the chairman of Capital Cities Broadcasting Corporation, New York City. Principal, \$15,537.

Lawrence E. Spivak (1963). Established by the producer of 'Meet the Press' television program. Principal, \$6,752.

Maurice H. Stans (1966). Established by Maurice H. Stans, New York investment banker. Principal, \$2,000.

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, \$13,102.

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, \$7,122.

Ann Elizabeth Taylor (1967). Established by Miss Taylor, Class of 1910, Austin, Minnesota, for students majoring in history. Principal, \$1,595.

Henry J. Taylor (1957). Established by the United States Ambassador to Switzerland. For an unusually promising young man. Principal, \$6,000.

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, \$8,355.

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.

Gene Tunney (1967). Established by the former boxing champion. Principal, \$5,000.

Charles J. Turck (1958). Established by alumni and friends of Macalester's ninth president (1939-58). Principal, \$15,132.

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.

Robert A. Uppgren Memorial (1967). Established by the family and friends of Robert A. Uppgren, Class of 1946, to be awarded with preference to a student of the biology of natural resources. Principal, \$3,573.

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, \$15,067.

Kurt E. Volk (1961). Established by Kurt E. Volk Foundation, Bridgeport, Connecticut. Principal, \$16,000.

DeWitt Wallace (C.P.D.A.) (1962). Established by the Council for Periodical Distributors Associations, Inc. to recognize and honor Mr. Wallace on the fortieth anniversary of the Reader's Digest. Principal, \$11.225.

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 form 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.

 ${\it DeWitt\ Wallace\ Scholarships}. \ Established\ by\ DeWitt\ Wallace.\ Awarded\ to\ middle-income\ students\ with\ good\ academic\ records\ who\ need\ special\ financial\ help\ to\ attend\ Macalester.$

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, \$25,062.

Mrs. Charles Allen Ward (1963). Established by Mrs. Ward, prominent St. Paul business woman. Principal, \$11,111.

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, \$18.480

Mr. and Mrs. Howard Ware Endowed Scholarship (1953). Established by the estate of Clara M. Ware. Principal, \$1,775.

Fred A. Waterous (1962). Established by the president of the board of the Waterous Company, St. Paul. Principal, \$5,000.

Ridley Watts (1965). Established by the retired New York textile manufacturer. Principal, \$10,000.

E.A. Webb (1915). Established through a bequest in the will of Mr. Webb, founder of the Webb Publishing Company, St. Paul and The Farmer. For a student from the Central Presbyterian Church of St. Paul. Principal, \$3,044.

Sidney J. Weinberg (1965). Established by the New York City investment broker. Principal, \$10,000.

O.J. Weldon (1958). Established by Mr. Weldon, partner in the New York City accounting firm of Hunter and Weldon. Principal, \$7,700.

Louis F. Weyand (1963). Established by an executive of Minnesota Mining company and a trustee of Macalester College (1958-64). Principal, \$6,841.

White Bear Lake Presbyterian Centennial (1963). Established by the First Presbyterian Church of White Bear Lake, Minnesota, for a student who plans to enter a church vocation. Principal, \$15,100.

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.

James S. Will (1961). Established by classmates and friends as a memorial to Mr. Will, Class of 1954.

Principal \$6 265

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.

Williams Brothers (1931). Established by Louis H. and Charles R. Williams of Minneapolis. Principal, \$1,000.

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, \$42,000.

David J. Winton Memorial Endowed Scholarship (1981). Established by his wife, Katherine D. Winton, in loving memory of David J. Winton, who served on the Macalester College Board of Trustees (1937-81) and as its chairman (1947-49). Principal, \$250,076.

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.

General Robert E. Wood (1959). Established by General Wood, director and president of Sears, Roebuck & Company, Chicago, Illinois. Principal, \$5,000.

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, \$41,484.

Mary S. and Thomas E. Young (1961). Established by Mr. and Mrs. Young, financiers, Portland, Oregon. Principal, \$21,000.

Robert R. Young (1964). Established by the president of the New York Central Railroad and augmented by his successor, Alfred E. Perlman, and other friends of Mr. Young. Principal, \$8,556.

Annually Contributed Scholarships

The Charles and Ellora 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.

Mark Greenleaf Johnson Memorial Travel Scholarship Fund. Established by Mrs. Dorothy L. Johnson in memory of her son, Mark Greenleaf Johnson, Class of 1978. To be awarded to a deserving student with financial need who has worthy educational travel plans.

William B. and Dorothy A. Korstad Scholarship. Established by Mr. and Mrs. Korstad, Class of 1938, to be given to a student, preferably from out-state Minnesota.

Macalester College National Merit and Achievement Scholarships. Macalester sponsors forty scholarships in each entering class for finalists in the National Merit competition, and one scholarship in each entering class for a finalist in the Merit Corporation's National Achievement competition for minority students. For many years, the Reader's Digest Association, Inc., sponsored Merit Scholarships for finalists attending Macalester.

Macalester Parents for International Relations Financial Aid Fund. The organization contributes annually to a fund to be awarded to outstanding international students at Macalester College whose academic achievements merit financial assistance.

National Presbyterian College Scholarship Program. Open to members of the United Church in the U.S.A., these scholarships are awarded by The Program Agency to students attending Presbyterian-related colleges to recognize and encourage scholastic ability and qualities of character and learning.

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.

Prizes

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.

David R. Coddon Pre-Medical Prize. Contributed annually by Dr. David R. Coddon, Class of 1945. A cash award for a junior pre-medical student with potential for success in the medical profession and one capable of conducting research.

American Cyanamid Endowed Prize. Established for 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

Board of Friends of the Wild Flower Garden, Inc. Established by the Board of Friends of the Wild Flower Garden, Inc. in 1979. A cash award to a junior or senior student in biology who has shown exceptional interest and promise in environmental sciences or a related nature field.

CHEMISTRY

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

 ${\it The Collins Endowed Prize in Extemporaneous Speaking}. \ {\it Established by Dr. G. Rowland Collins, Class of 1916}.$

The Collins Prize in Rhetorical Criticism. Established by Mrs. G. Rowland Collins, associate professor of psychology and assistant director of student services at Macalester (1947-55).

Charles W. Ferguson Endowed Prizes in Public Speaking. Established by a senior editor of the Reader's Digest. Awarded to students on the basis of demonstrated ability in public speaking during the entire forensic year.

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.

 $\it Mike McEwen Prize.$ 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.

 $\textit{Wall Street Journal Prize}. A medal of merit and one year's subscription to The Wall Street Journal awarded by the publishers to the outstanding senior in the field of economics and business.}$

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 Parrish Poetry Award. Established in 1978 by Stanley and Marian Parrish 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 Faculty Award. A book 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. Hélène 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 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.

Patti Hunter Prize for International Study or Travel. Established by Robert E. Hunter, M.D., Class of 1971, in honor of his wife, Patti Hunter. To be awarded to a meritorious student for study or travel abroad.

S.W. Hunter Award. Established by Robert E. Hunter, M.D., Class of 1971, in honor of his father, S.W. Hunter, M.D. To be given to two distinguished students who have demonstrated a commitment to peace and international understanding.

International Studies Prize. A cash prize for a senior majoring in International Studies.

MATHEMATICS

Ezra J. Camp Endowed Prize. Established by colleagues and friends in memory of Dr. Camp, professor and chairman of the department of mathematics.

MUSIC

Lila Bell Acheson Wallace Endowed Prize. Established by Mrs. DeWitt Wallace, co-founder of the Reader's Digest. A cash award of \$100 to the outstanding student majoring in music.

Prizes

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.

Mildred Phillips Kindy Endowed Prize. Established by Miss Ann Elizabeth Taylor, Class of 1910, in memory of her classmate. An award of \$100 to a student specializing in piano or voice.

Samuel W. Raudenbush Memorial Endowed Prize. Created by Mrs. Alma M. Raudenbush in memory of her husband. An award of \$100 to a 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.

The Macalester College Women's Varsity Soccer Prize. To the member of the women's varsity soccer team whose personal conduct, soccer skills, cooperation and leadership ability have made the greatest contribution to the success of her team as a Macalester College activity.

Dorothy Michel Award. Established by family, alumni and friends in memory of Dorothy Michel, 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

Physics/Astronomy Faculty Award. Book awards for outstanding service to departmental activities instructional program.

POLITICAL SCIENCE

Hubert H. Humphrey and Walter F. Mondale Endowed Award in Political Science. Established to honor, respectively, a former member 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

Macalester Psychology Award. Departmental prize for outstanding student majoring 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

 ${\it Beny-Rinder-Swain \ Prize \ in \ Sociology}. \ Awarded \ to \ a senior \ major \ for \ outstanding \ written \ work \ in \ the area \ of \ Applied \ Sociology.$

SPANISH

The Spanish Department Faculty Award. The faculty of the Spanish department awards a prize (book) annually to a Spanish senior major for distinguished work in his/her Spanish major.

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 \$292,757.

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, \$25,625.

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, \$7,100.

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, \$13,400.

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, \$50,783.

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, \$19,725.

Den E. Lane and Elsie J. Lane Endowment. Established from the estate of Elsie J. Lane, the income to be used at the discretion of the College's Board of Trustees. Principal, \$720,313.

George P. and Wilma Fox Leonard Athletic Department Endowed Fund. Established by George P. and Wilma Fox Leonard, Class of 1927, to be used at the discretion of the director of athletics with the approval of the president of the College, to enhance the athletic program. Principal, \$51,562.

The Tom Leonard Fund. Established by George P. and Wilma Fox Leonard, Macalester Class of 1927, in memory of their son, to be used to enhance close faculty/student relations. Expenditures are to be

Endowed Professorships

approved by academic department heads and the vice president for academic affairs. Principal \$147.696.

Henry Lepp Memorial (1991). Established by colleagues, family and friends in memory of Henry Lepp, a long-time faculty member in the Geology department at Macalester College. The fund is to be used to set up and maintain the Henry Lepp Museum and to send geology students to summer field camp (a necessary prerequisite to graduate school). Principal, \$23,620.

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, \$253,203.

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.

Weatherhead Foundation Crew Program Endowment Fund, The. Established by The Weatherhead Foundation to support the Macalester College Crew Program. \$19,000.

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

Advancement

Trustees

Officials of the College

President Michael S. McPherson, B.A., M.A., Ph.D. Provost A.Wayne Roberts, A.A., B.S., M.A., Ph.D. Craig H. Aase, B.A., M.B.A. ('70)

and Treasurer
Vice President for College Richard A. Ammons, B.A., M.B.A.

Dean of Students

Dean of Admissions

Assistant to the President and
Secretary to the Board of

Laurie B. Hamre, B.A., M.A.,
William M. Shain, A.B., J.D.
Alexander G. (Sandy) Hill, B.A. ('57)

Emeriti/Emeritae Faculty

Professors Emeriti/Emeritae

(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.

J. Donald Butler. *James Wallace Professor of Religion (1961–72); A.B., University of Omaha, 1929; M.R.E., Biblical Seminary in New York, 1933; Ph.D., New York University, 1937.*

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.*

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.

Emeriti/Emeritae Faculty

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.*

Edwin James Robinson, Jr. Professor of Biology (1963–84); A.B., Dartmouth College, 1939; M.S., New York University, 1941; Ph.D., New York University, 1948

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.

William Saltzman. Professor of Art (1966–83); B.S., University of Minnesota, 1940.

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.

Joel H. Baer. Associate Professor of English (1966); A.B., University College (NYU), 1960; M.A., Princeton University, 1965; Ph.D., Princeton University, 1969.

Karla Ballman. Assistant Professor of Mathematics and Computer Science (1991); B.A., Macalester College, 1983; M.S., Massachusetts Institute of Technology, 1989; Ph.D., Massachusetts Institute of Technology, 1991.

John Bernstein. Professor of English (1967); A.B., Haverford College, 1957; Ph.D., University of Pennsylvania, 1961.

Donald Betts. Professor of Music (1959); M.M., Indiana University, 1959.

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 D. 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.

Julie A. Bunn. Assistant Professor of Economics (1992); B.A., Occidental College, 1979; M.A., Stanford University, 1985; Ph.D., Stanford University, 1993.

Ruth Elizabeth Burks. Assistant Professor of English (1993); B.A., University of California-Berkeley, 1971; M.A., University of California-Berkeley, 1974; Ph.D., University of California-Los Angeles, 1993.

Janet L. Carlson. Associate Professor of Chemistry (1978); B.A., Hamline University, 1974; Ph.D., Stanford University, 1978.

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. Assistant 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.

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. Assistant 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 Autònoma de Barcelona, 1987; Ph.D., University of California, Davis, 1993.

James R. Doyle. Assistant 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.

Salman Elbedour. Visiting Assistant Professor of Psychology (1997); B.A., Ben-Gurion University, 1985; M.A., University of Minnesota, 1988; Ph.D., University of Minnesota, 1993.

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.

Faye Fei. Assistant Professor of Dramatic Arts and Dance (1995); M.A., M.Phil., Ph.D., City University of New York, 1986-1991.

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.

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.

Giles Y. Gamble. Associate Professor of English (1967); A.B., Earlham College, 1956; Ph.D., Stanford University, 1969.

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.

Ch. Didier Gondola. Visiting Assistant Professor of History (1997); B.A., Université, Paris-Sorbonne, 1987; M.A., Université, Paris-VII-Denis-Diderot, 1988; Ph.D., Université, Paris-VII-Denis-Diderot, 1993.

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.

Sherry Gray. Visiting Assistant Professor of International Studies (1996); B.A., University Of Colorado, 1981; M.A., University of Denver, 1986; Ph.D., University of Denver, 1992.

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. Associate 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. *Professor of Russian (1983); Diplom, Handelshogskolan vid Abo Akademi, Finland, 1964; A.M., Purdue University, 1977; Ph.D., University of Michigan, 1982.*

Becky Heist. Senior Instructor in Dramatic Arts and Dance (1980); B.F.A., University of Utah, 1973. M.F.A., University of Illinois, 1996.

William Harley Henry. Professor of English (1966); B.A., Kenyon College, 1959; B.A., Oxford University, 1961; M.A., Johns Hopkins University, 1963; M.A., Oxford University, 1967; Ph.D., Johns Hopkins University, 1970.

James N. Heyman. Assistant Professor of Physics (1994); A.B., Williams College, 1985; Ph.D., University of California, Berkeley, 1992.

Eddie P. Hill. O. T. Walter Professor of Biology (1964); B.A., Nebraska State Teachers College, 1952; M.A., Colorado State College, 1957; Ph.D., University of Nebraska, 1962.

Michael Hofmann. Visiting Professor of Communication Studies (1997); M.A., Free University, Berlin; Ph.D., Free University, Berlin.

David Henry Hopper. *James Wallace Professor of Religious Studies (1959); B.A.*, *Yale University, 1950; B.D., Princeton Theological Seminary, 1953; Th.D., Princeton Theological Seminary, 1959.*

Daniel J. Hornbach. *Professor of Biology (1984); B.S., University of Dayton, 1974; M.S., University of Dayton, 1976; Ph.D., Miami University, 1980.*

Carol A. Horton. Assistant Professor of Political Science (1995); B.A., Colorado College, 1984; M.A., University of Chicago, 1988, Ph.D., University of Chicago, 1995.

Rebecca C. Hoye. Assistant Professor of Chemistry (1995); B.A., Bucknell University, 1973; M.A., Harvard University, 1975; Ph.D., University of Minnesota, 1981.

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.

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.

John Michael Keenan. Associate Professor of English (1965); B.A., Hobart College, 1957; A.M., University of Rochester, 1958.

Daniel R. Keyser. Assistant 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.

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.

James W. Laine. Associate Professor of Religious Studies (1985); B.A., Texas Tech University, 1974; M.T.S., Harvard University, 1977; Th.D., Harvard University, 1984.

David A. Lanegran. Professor of Geography (1969); B.A., Macalester College, 1963; M.A., University of Minnesota, 1966; Ph.D., University of Minnesota, 1970.

Andrew A. Latham. Assistant Professor of Political Science (1997); B.A., York University; M.A., Queen's University; Ph.D., York University, 1997.

Philip A. Lee, Jr. Associate Professor of French (1966); A.B., Bowdoin College, 1956; M.A., University of North Carolina, 1961; Ph.D., University of North Carolina, 1967.

Francesca Santoro L'hoir. Visiting Assistant Professor of Classics (1991); B.A., University of California, Irvine, 1972; M.A., University of California, Berkeley, 1975; Ph.D., University of Missouri, 1988.

Carleton Macy. Professor of Music (1978); B.A., Redlands University, 1966; M.A., California State University, Fullerton, 1972; D.M.A., University of Washington, 1978.

Teresita Martínez-Vergne. Associate Professor of History (1991); B.A., Emory University, 1977; M.A., University of Texas-Austin, 1979; Ph.D., University of Texas, Austin, 1985.

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Michal McCall-Meshejian. Professor of Sociology (1980); B.A. University of Iowa, 1964; M.A., University of Illinois, 1966; Ph.D., University of Illinois, 1975.

David W. McCurdy. Professor of Anthropology (1966); B.A., Cornell University, 1957; M.A., Stanford University, 1959; Ph.D., Cornell University, 1964.

Susanna McMaster. Assistant Professor of Geography (1992); B.A., University of California, 1983; M.A., University of California, 1988; Ph.D., State University of New York, 1994.

Anna S. Meigs. Associate Professor of Anthropology (1982); B.A., Wellesley College, 1965; Ph.D., University of Pennsylvania, 1977.

Raymond Charles Mikkelson. *Professor of Physics* (1965); B.A., St. Olaf College, 1959; M.S., University of Illinois, 1961; Ph.D., University of Illinois, 1965.

Karine S. Moe. Assistant Professor of Economics (1995); B.A., Saint Olaf College, 1985; M.P.P., Harvard University, 1989; M.A., University of Minnesota, 1992, Ph.D., University of Minnesota, 1995.

Richard K. Molnar. Associate Professor of Mathematics and Computer Science (1983); B.S., Georgetown University, 1967; M.S., University of North Carolina, 1969; Ph.D., University of North Carolina, 1973.

David Chioni Moore. Assistant Professor of International Studies and English (1995); B.A., Brown University, 1986; Rotary Foundation graduate scholar, Universite de Dakar, Dakar-Fann, Senegal, 1986–1987; Ph.D., Duke University, 1996.

Robert L. Morris. Associate Professor of Music (1992); B.M., DePaul University, 1964; M.M., Indiana University, 1970; D.M.A., University of Iowa, 1984.

Roger K. Mosvick. *Professor of Communication Studies (1956); B.A., Macalester College, 1952; M.A., University of Minnesota, 1959; Ph.D., University of Minnesota, 1966.*

Peter B. Murray. Professor of English (1968); B.A., Swarthmore College, 1950; M.A., University of Pennsylvania, 1959; Ph.D., University of Pennsylvania, 1961.

Michael Obsatz. Associate Professor of Sociology (1967); B.A., Brandeis University, 1963; M.A., University of Chicago, 1964; Ph.D., University of Chicago, 1967.

J. Andrew Overman. Associate Professor of Classics (1993); B.A., St. John's University, 1978; B.D., University of Edinburgh, 1981; Ph.D., Boston University, 1989.

Kathleen K. Parson. Professor of Biology and Chemistry (1974); B.A., Macalester College, 1967; Ph.D., University of Minnesota, 1973.

Anthony B. Pinn. Assistant Professor of Religious Studies (1994); B.A., Columbia University, 1986; M.Div., Harvard University, 1989; M.A., Harvard University, 1991, Ph.D., Harvard University, 1994.

Gerald R. Pitzl. *Professor of Geography (1972); B.S., University of Minnesota, 1964; M.A., University of Minnesota, 1971; Ph.D., University of Minnesota, 1974.*

Peter Rachleff. Professor of History (1982); B.A., Amherst College, 1973; M.A., University of Pittsburgh, 1976; Ph.D., University of Pittsburgh, 1981.

Jeremiah Reedy. *Professor of Classics (1968); S.T.B., Gregorian University, 1958; M.A., University of South Dakota, 1960; M.A., University of Michigan, 1966; Ph.D., University of Michigan, 1968.*

Arthur Wayne Roberts. Professor of Mathematics and Computer Science (1965); A.A., Morton Junior College, 1954; B.S., Illinois Institute of Technology, 1956; M.A., University of Wisconsin, 1958; Ph.D., University of Wisconsin, 1965.

Mayra V. Rodriguez. Assistant Professor of Art (1995); B.A., New York University, 1985; M.A., University of Michigan, 1987; Ph.D., University of Michigan, 1996.

Calvin J. Roetzel. Arnold H. Lowe Professor of Religious Studies (1969); B.A., Hendrix College, 1952; B.D., Perkins School of Theology, 1955; Ph.D., Duke University, 1968.

Raymond R. Rogers. Assistant Professor of Geology (1997); B.S., Northern Arizona University, 1985; M.S., University of Montana, 1989; Ph.D., University of Chicago, 1995.

Emily S. Rosenberg. *DeWitt Wallace Professor of History (1974); B.A., University of Nebraska, 1966; M.A., State University of New York at Stony Brook, 1970; Ph.D., State University of New York at Stony Brook, 1973.*

Norman L. Rosenberg. *DeWitt Wallace Professor of History (1975); B.A., University of Nebraska, 1964; M.A., University of Nebraska, 1967; Ph.D., State University of New York at Stony Brook, 1972.*

Jack E. Rossmann. Professor of Psychology (1964); B.S., Iowa State University, 1958; M.S., Iowa State University, 1960; Ph.D., University of Minnesota, 1963.

Jerry J. Rudquist. Professor of Art (1958); B.F.A., Minneapolis College of Art and Design, 1956; M.F.A., Cranbrook Academy of Art, 1958.

Ahmed I. Samatar. Professor of Political Science (1994) and Dean of International Programs and Director of International Studies; B.A., University of Wisconsin, 1978; M.A., University of Denver, 1981; Ph.D., University of Denver, 1984.

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G. Michael Schneider. *Professor of Mathematics and Computer Science (1982);* B.S., University of Michigan, 1966; M.S., University of Wisconsin, 1968; Ph.D., University of Wisconsin, 1974.

Virginia Schubert. Professor of French (1965); B.A., College of St. Catherine, 1957; M.A., University of Minnesota, 1961; Ph.D., University of Minnesota, 1973.

John R. Schue. Professor of Mathematics and Computer Science (1962); B.A., Macalester College, 1953; Ph.D., Massachusetts Institute of Technology, 1959.

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Stanton G. Sears. Associate Professor of Art (1983); B.F.A., Rhode Island School of Design, 1973; M.F.A., Pennsylvania State University, 1976.

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Full Time Faculty

Paul Douglas Solon. *Professor of History (1970); B.A., University of California, Berkeley, 1964; M.A., University of California, Berkeley, 1966; Ph.D., Brown University, 1970.*

Clay Steinman. Associate Professor of Communication Studies (1993); A.B., Duke University, 1971; M.S., Columbia University, 1972; M.A., New York University, 1976; Ph.D., New York University, 1979.

Linnea A. Stenson. Visiting Assistant Professor of English (1989); B.A., Augustana College, 1983; M.A., University of Minnesota, 1987.

Dianne Stewart. Visiting Assistant Professor of Religious Studies (1997); A.B., Colgate University, 1990; M.Div., Harvard Divinity School, 1993.

James B. Stewart. *James Wallace Professor of History (1969); B.A., Dartmouth College, 1962; M.A., Case Western Reserve University, 1966; Ph.D., Case Western Reserve University, 1968.*

James Straka. Visiting Assistant Professor of Biology and Chemistry (1995); B.A., Macalester College, 1970; Ph.D., Utah State University, 1978.

Jaine Strauss. Associate Professor of Psychology (1993); B.A., Swarthmore College, 1980; M.A., University of Rochester, 1983; Ph.D., University of Rochester, 1985.

Vasant A. Sukhatme. Edward John Noble Associate Professor of Economics (1978); B.A., University of Calcutta, 1965; M.A., Delhi School of Economics, 1967; M.A., University of Southern California, 1971; Ph.D., University of Chicago, 1977.

William Sun. Associate Professor of Dramatic Arts and Dance (1995); M.A., State University of New York, 1985; Ph.D., New York University, 1990.

Anne Sutherland. Professor of Anthropology (1981); B.A., University of Texas, 1965; Diploma, Oxford University, 1967; B. Litt., Oxford University, 1968; Ph.D., Oxford University, 1972.

Satoko Suzuki. Assistant Professor in Japanese Language (1990); B.A., University of Niigata, 1986; M.A., University of Minnesota, 1989, Ph.D., University of Minnesota, 1993.

Yue-him Tam. Professor of History (1990); B.A., New Asia College, Hong Kong, 1965; M.A., Indiana University, 1968; M.A., Princeton University, 1973; Ph.D., Princeton University, 1975.

Andrea Remick Tilden. Assistant Professor of Biology (1994); B.S., Alma College, 1988; Ph.D., University of Oklahoma, 1994.

Charles C. Torrey. Associate Professor of Psychology (1966); B.A., Swarthmore College, 1955; Ph.D., Cornell University, 1963.

Thomas D. Varberg. Assistant Professor of Chemistry (1992); B.A., Hamline University, 1985; Ph.D., Massachusetts Institute of Technology, 1990.

Kimberley Ann Venn. Clare Boothe Luce Professorship/Assistant Professor of Physics (1996); B.S., University of Toronto, 1987; M.S., University of Texas at Austin, 1990; Ph.D., University of Texas at Austin, 1994.

Joëlle Vitiello. Associate Professor of French (1990); D.E.U.G. (General University Education Degree), Universite Paris XIII, 1979; Licence es Lettres

Modernes, Universite Paris XIII, 1978; First Certificate of Master's Degree, Universite Paris XIII, 1979; M.A., Stanford University, 1988; Ph.D., Stanford University, 1990.

James von Geldern. Associate Professor of Russian (1988); B.A., Tufts University, 1980; M.A., Brown University, 1981; Ph.D., Brown University, 1987.

Stan Wagon. Professor of Mathematics and Computer Science (1990); B.A., McGill University, 1971; Ph.D., Dartmouth College, 1975.

Robert Hall Warde. Associate Professor of English (1970); B.A., Princeton, 1965; M.A., Harvard University, 1968; Ph.D., Harvard University, 1977.

Karen Warren. Associate Professor of Philosophy (1985); B.A., University of Minnesota, 1970; M.A., University of Massachusetts, 1974; Ph.D., University of Massachusetts, 1978.

Jack M. Weatherford. Professor of Anthropology (1983); B.A., University of South Carolina, 1967; M.A., University of South Carolina, 1972; M.A., University of California, San Diego, 1973; Ph.D., University of California, San Diego, 1977.

Gerald F. Webers. *DeWitt Wallace Professor of Geology (1965); B.S., Lawrence College, 1954; M.S., University of Minnesota, 1961; Ph.D., University of Minnesota, 1964.*

Matthew G. Weinstein. Assistant Professor of Education (1995); B.A., Oberlin College, 1981; M.A., Stanford University, 1986, Ph.D., University of Wisconsin, Madison, 1995.

Peter Weisensel. Professor of History (1973); B.S., University of Wisconsin, 1963; M.S., University of Wisconsin, 1965; Ph.D., University of Minnesota, 1973.

Gerald Weiss. Associate Professor of Psychology (1965); B.A., Brooklyn College, 1953; M.A., University of Iowa, 1954; Ph.D., University of Iowa, 1965.

Henry R. West. Professor of Philosophy (1965); A.B., Emory University, 1954; M.A., Duke University, 1958; B.D., Union Theological Seminary, 1959; Ph.D., Harvard University, 1965.

Russell A. Whitehead. Associate Professor of Biology (1969); B.S., Northland College, 1954; M.S., Oregon State University, 1962; Ph.D., Oregon State University, 1966.

Eric P. Wiertelak. Assistant Professor of Psychology (1993); B.A., University of Central Florida, 1989; M.A., University of Colorado, 1991; Ph.D., University of Colorado, Boulder, 1993.

Juliet A. Williams. Assistant Professor of Political Science (1997); B.A., Harvard University, 1990; M.A., Cornell University, 1994;

Karl R. Wirth. Associate Professor of Geology (1990); B.S., Beloit College, 1982; M.S., Cornell University, 1986; Ph.D., Cornell University, 1991.

Wayne C. Wolsey. Professor of Chemistry (1965); B.S., Michigan State University, 1958; Ph.D., University of Kansas, 1962.

W. L. Wai-leung Wong. Hubert H. Humphrey Visiting Professor of International Studies (1997); B.A., The Chinese University of Hong Kong, 1969; M.S., Oklahoma State University, 1971; Ph.D., Ohio State University, 1976.

Part Time Faculty

Anne E. Carayon. Instructor of French (1981); B.A., State University New York at Buffalo, 1974; M.A., University of Arizona, 1976.

Rabbi Barry D. Cytron. Lecturer in Religious Studies (1989); B.S., Columbia University, 1965; M.A., Columbia University, 1968; Ordination, Jewish Theological Seminary of America, 1970; Ph.D., Iowa State University, 1982.

Mahmoud El-Kati. Lecturer in History (1970); B.A., Wilberforce University, 1960.

Gabriele Ellertson. Instructor of Art (1986); B.F.A., University of Minnesota, 1977; M.F.A., University of Minnesota, 1980.

T. Jeffery Evans. Instructor in Economics and Business (1978); B.B.A., University of Wisconsin, 1974.

Jerry K. Fisher. *Professor of Communication Studies (1969); B.A., Macalester College, 1959; M.Div., Union Theological Seminary, 1964; Ph.D., University of Virginia, 1974.*

Julia Friedman. Adjunct Associate Professor of Economics (1979); B.A., University of Missouri, 1965; M.A., University of Oregon, 1970; Ph.D., University of Oregon, 1973.

Annick Fritz-Smead. *Instructor of French* (1978); B.A., University of Besancon, France, 1971; M.A., University of Besancon, France, 1972; Ph.D. University of Minnesota, 1991.

Juanita Garciagodoy. Instructor of Spanish (1983); B.A., Macalester College, 1974; M.A., Harvard University, 1976.

Carol A. Gersmehl. *Instructor of Geography (1987); B.A., Concordia Teachers College, 1967; M.A., University of Georgia, 1970.*

Jan Gilbert. Lecturer in Music (1987); A.B., Douglass College, 1969; M.A., Villa Schifanoia, Florence, Italy, 1972; D.M.A., University of Illinois, 1979.

Roxane Harvey Gudeman. *Instructor in Psychology (1985); B.A., Radcliffe College, 1962; M.Ed., Harvard University, 1969; Ph.D., University of Minnesota, 1981.*

Mary A. Hark. Instructor in Art (1990); B.A., College of St. Benedict, 1978; M.A., University of Iowa, 1987; M.F.A., School of the Art Institute of Chicago, 1989.

Aiko (Fisher) Hiraiwa. Senior Instructor in Japanese (1975); B.A., Tokyo Joshi Daigaku, 1957.

Joy Laine. Instructor in Philosophy (1987); B.A., Hull University, 1974; M.A., Surrey University, 1979; Ph.D., The Open University, Oxford, England, 1989.

George Latimer. Distinguished Visiting Professor in Urban Studies, 1996; B.A., St. Michael's College, 1958; L.L.B., Columbia University Law School, 1963.

Peter Sowah Mensah, Lecturer in Music (1987); B.M., Gen. Dip., Music, University of Ghana; M.A., University of Minnesota (Ethnomusicology).

Charles M. Norman. Lecturer in English (1965); A.B., University of Louisville, 1958.

Alexs D. Pate. Lecturer in English (1991); B.A., Temple University, 1976.

Sonia Patten. Lecturer in Anthropology (1987); B.A., University of Minnesota, 1960; M.S., Iowa State University, 1974

Gisela Peters. Lecturer in German (1988).

Rabbi Bernard S. Raskas. Visiting Professor of Religious Studies (1985); B.A., Washington University; Ordination, Jewish Theological Seminary of America, 1949; M.H.L. and Doctor of Divinity, 1975.

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Daniel Schwalbe. Visiting Assistant Professor in Mathematics and Computer Science (1993); B.S., University of Notre Dame, 1981; M.S., Brown University, 1985; Ph.D., Brown University. 1986.

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Daniel Soneson. Instructor in German (1993); B.A., Macalester College, 1975; M.A., Indiana University, 1979 (Religious Studies), 1983 (German); Ph.D., Indiana University, 1985.

Rebecca Stanchfield. Lecturer in Dramatic Arts and Dance (1984).

David L. Sunderland. Instructor in Spanish (1982); B.A., Middlebury College, 1967; M.A., Middlebury College, 1968.

Susan A. E. Toth. Writer-In-Residence and Adjunct Professor of English (1969); B.A., Smith College, 1961; M.A., University of California, Berkeley, 1963; Ph.D., University of Minnesota, 1969.

Adolf L. Vandendorpe. *Adjunct Professor of Economics (1971); Ingenieur Commercial, Louvain University, Belgium, 1961; Ph.D., Massachusetts Institute of Technology, 1970.*

Sharon L. Varosh. Lecturer in Dramatic Arts and Dance (1988); B.S., Georgetown University, 1976.

Studio Instructors

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

Studio Instructors

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

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(Drums & Xylophones)/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

David Whetstone, East Indian Improvisation/Sitar

Artists-in-Residence

Camilla Heller, Cello, Macalester Trio (1971)

John Jensen, Piano, Macalester Trio

Michael Sobieski, Violin, Macalester Trio

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.

Upper Midwest Association for Inter-Cultural Education (UMAIE): A consortium of 10 colleges which cooperate to provide depth and resources for an international curriculum.

Accreditations, Approvals and Memberships

Accredited by: North Central Association of Colleges and Secondary Schools; The National Council for Accreditation of Teacher Education.

Approved by: American Chemical Society; The National Association of Schools of Music.

Memberships: American Council on Education; Association of American Colleges; The Presbyterian College Union; Minnesota Private College Council; The American Association of Colleges for Teacher Education.

Enrollment and Graduation Statistics 1996–1997

Enrollment, Fall Term 1996

| | Men | Women | Total |
|-----------------------------|-----|-------|-------|
| Degree Seeking Students | 764 | 985 | 1749 |
| Non-Degree Seeking Students | 14 | 34 | 48 |
| Total | 778 | 1019 | 1797 |

Racial/Ethnic Background—Fall Term 1996

| | Number of | Percentage of |
|-------------------|-----------|---------------|
| | Students | Student Body |
| White American | 1390 | 77.3 |
| International | 172 | 9.6 |
| Asian American | 99 | 5.5 |
| Black American | 66 | 3.7 |
| Hispanic American | 59 | 3.3 |
| American Indian | 11 | 0.6 |
| Total | 1797 | 100.0 |
| | | |

Students By Age—Fall 1996

| | Number of | Number of | |
|-------------|-----------|-----------|---------------|
| | Part-Time | Full-Time | Percentage of |
| | Students | Students | Student Body |
| Under 18 | 12 | 45 | 3.2 |
| 18-19 | 3 | 818 | 45.7 |
| 20-21 | 8 | 739 | 41.6 |
| 22-24 | 32 | 95 | 7.1 |
| 25-29 | 6 | 11 | 0.9 |
| 30-34 | 9 | 3 | 0.7 |
| 35-39 | 3 | 1 | 0.2 |
| 40-49 | 7 | 3 | 0.5 |
| 50-64 | 2 | 0 | 0.1 |
| 65 and over | 0 | 0 | 0.0 |
| Total | 82 | 1715 | 100.0 |

Geographical Distribution, Fall Term 1996

| | Number of | Percentage of |
|---------------------------------|-----------|---------------|
| | Students | Student Body |
| Ramsey County (Minnesota) | 101 | 5.6 |
| Hennepin County (Minnesota) | 145 | 8.1 |
| Minnesota (outside Twin Cities) | 247 | 13.7 |
| U.S.(excluding Minnesota) | 1132 | 63.0 |
| Foreign Countries | 172 | 9.6 |
| Total | 1797 | 100.0 |

Home States of Students—Fall 1996

Finland-1

North Mariana Island-1 Alabama-1 Kentucky-11 Alaska-12 Ohio-43 Louisiana-2 Arizona-12 Maine-15 Oklahoma-8 Arkansas-1 Maryland-34 Oregon-56 Pennsylvania-25 California-57 Massachusetts-69 Colorado-26 Michigan-39 Puerto Rico-2 Connecticut-13 Minnesota-493 Rhode Island-8 Delaware-1 Missouri-33 South Carolina-3 District of Columbia-15 Montana-13 South Dakota-18 Nebraska-22 Florida-7 Tennessee-16 Texas-26 Georgia-6 Nevada-2 Hawaii-5 New Hampshire-13 Utah-4 Idaho-2 New Jersey-19 Vermont-12 New Mexico-3 Illinois-74 Virginia-11 Indiana-17 New York-71 Washington-44 Wisconsin-128 Iowa-71 North Carolina-5 Kansas-14 North Dakota-16 Wyoming-1

Home Countries of Foreign Students by Citizenship—Fall 1996

Albania-1 Germany-2 Philippines-2 Ghana-3 Argentina-1 Poland-2 Republic of Singapore-2 Armenia-1 Greece-1 Australia-1 Hong Kong-2 Russia-3 Austria-3 Hungary-1 Senegal-1 Slovakia-1 Bahamas-10 Iceland-1 Bangladesh-1 India-6 Somalia-1 Belgium-1 Indonesia-1 South Africa-5 Bolivia-4 Israel-1 South Korea-1 Bosnia-1 Jamaica-2 Spain-1 Brazil-5 Japan-15 Sri Lanka-1 Swaziland-2 Bulgaria-1 Lithuania-1 Burundi-1 Madagascar-1 Sweden-3 Canada-7 Switzerland-1 Mauritius-3 Cayman Islands-2 Tanzania-3 Mexico-2 China-1 Morocco-1 Thailand-1 Columbia-2 Nepal-1 Turkey-11 Costa Rica-1 Netherlands-2 Uganda-1 Cyprus-9 New Zealand-3 Ukraine-1 Denmark-2 United Kingdom-3 Norway-4 Dominica-1 Pakistan-4 Venezuela-1 Dominican Republic-1 Panama-1 Yugoslavia-1 El Salvador-1 Peru-3 Zimbabwe-4

Class of 1996 B.A. Degrees by Department/Program

| (includes double majors) | |
|--------------------------|---|
| Anthropology-25 | International Studies-25 |
| Art-17 | Japan Studies-5 |
| Biology-37 | Latin American Studies-5 |
| Chemistry-12 | Linguistics-6 |
| Classics-11 | Mathematics-15 |
| Communication Studies-15 | Music-6 |
| Computer Science-9 | Philosophy-18 |
| Dramatic Arts-5 | Physics-8 |
| East Asian Studies-4 | Political Science-29 |
| Economics-44 | Psychology-41 |
| English-45 | Religious Studies-24 |
| Environmental Studies-25 | Russian-4 |
| French-4 | Russian, Central, East European Studies-1 |
| Geography-30 | Sociology-14 |
| Geology-14 | Spanish-10 |
| German-6 | Ūrban Studies-15 |
| History-39 | Women's Studies-13 |
| Individually Designed-7 | |

Graduation Rates

(Definition of student counts and computational methods determined by the Student Right-to-Know $\mathop{\rm Act})$

Six year graduation rate:

| For all freshmen entering the college in 1990 | 80% |
|---|-----|
| For all freshmen entering the college in 1989 | 79% |
| For all freshmen entering the college in 1988 | 79% |
| For all freshmen entering the college in 1987 | 74% |

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Additional Information/Useful Telephone Numbers

Information about Macalester College is available by contacting one of the appropriate offices listed below. (612) 696-6357 (800) 231-7974 (Admissions forms, international student admissions, College publications, and information about specific academic programs.) Financial Aid Office (612) 696-6214 (Financial aid requirements, application forms, and special financial aid opportunities.) (612) 696-6161 (Payment of college fees, repayment of student loans, and other business matters.) Office of Student Academic Records and the Registrar . . . (612) 696-6200 (Registration information, transfer credit policy, and requests for transcripts.) Office of the Dean of Students..... (612) 696-6220 (General information about student life, housing, health, special programs, and counseling services.) International Center (612) 696-6310 (Study away programs and international student affairs.) College Operator..... (612) 696-6000 (Additional phone numbers.) Address written correspondence to the appropriate office or department at

Macalester College, 1600 Grand Avenue, St. Paul, Minnesota 55105.