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### Colby College Catalogue 1991 - 1992

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### COLBY COLLEGE CATALOGUE 1991-1992

# Colby College Catalogue

SEPTEMBER 1991-AUGUST 1992

Waterville, Maine

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A booklet, Colby Perspective, with illustrative material, has been prepared for prospective students and may be obtained from the dean of admissions.

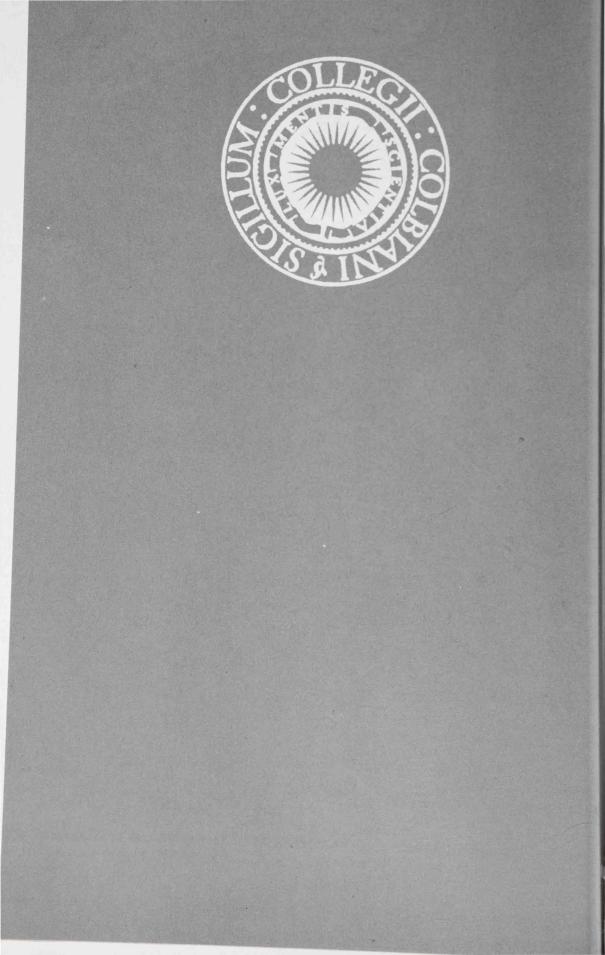
Colby College is accredited by the New England Association of Schools and Colleges. Membership in the association indicates that the institution has been carefully evaluated and found to meet standards agreed upon by qualified educators.

Colby College is a private, coeducational liberal arts college that admits students and makes personnel decisions on the basis of the individual's qualifications to contribute to Colby's educational objectives and institutional needs. The principle of not discriminating on the basis of race, color, sex, sexual orientation, religion, age, parental or marital status, national or ethnic origin, political beliefs, or disability unrelated to jobor course of study requirements is consistent with the mission of a liberal arts college and the law. Colby is an affirmative action/equal opportunity employer and operates in accordance with federal and state laws regarding nondiscrimination.

The College reserves the right in its sole judgment to make changes of any nature in its program, calendar, academic schedule, fees, deposits, or any other matters in this catalogue.

## 1 General Information

- Colby 5
- Colby Values and the Commons Plan 7
  - Campus Life 8
  - The Library 11
  - Career Services 12
    - Admission 13
    - Orientation 16
    - Student Fees 17
    - Financial Aid 21
  - General Regulations 22



### Colby

Chartered by the General Court of Massachusetts in 1813, seven years before Maine became a state, Colby is the 12th oldest independent liberal arts college in the nation. In 1871 it became the first previously all-male college in New England to admit women. Before World War II trustees voted to move the College from its crowded original site in downtown Waterville to the handsome Mayflower Hill campus of more than 700 acres, where 43 buildings have been constructed since 1937.

Today, Colby's 1700 students—evenly divided between men and women—come from virtually every state and more than 20 foreign countries. Alumni, numbering more than 19,000, are represented in all 50 states and in some 60 foreign countries. Students may choose from nearly 500 courses in 40 major fields and have wide flexibility in designing independent study programs, electing special majors, and participating in internships and exchange programs. More than half of all Colby students will study abroad at some time during their undergraduate experience.

Colby is committed to the belief that the best preparation for life, and especially for the professions that require specialized study, is a broad acquaintance with human knowledge. A hallmark of the Colby experience is the close relationship between students and faculty which serves to nurture the excitement that accompanies the discovery of ideas and values.

TheColby Plan (see p. 27), adopted in 1989, is a series often educational precepts that reflect the principal elements of a liberal education and serve as a guide for making reflective course choices, measuring educational growth, and for planning education beyond college. Students are urged to pursue these objectives not only in their course work but also through educational and cultural events, campus organizations and activities, and service to others both on campus and in the broader community.

To these ends, the Colby academic and residential program is designed to free each student to find and fulfill her or his unique potential. It is hoped that students will become critical and imaginative thinkers who are: welcoming of diversity and compassionate toward others; capable of distinguishing fact from opinion; intellectually curious and aesthetically aware; adept at synthesis as well as analysis; broadly educated with depth in some areas; proficient in writing and speaking; familiar with one or more scientific disciplines; knowledgeable about America and other cultures; able to create and enjoy opportunities for lifelong learning; willing to assume leadership roles as students and citizens; prepared to respond flexibly to the changing demands of the world of work; useful to society and happy with themselves.

Colby stands for diversity, without which we become parochial; for tolerance of various lifestyles and beliefs, without which we become mean-spirited; and for the protection of every individual against discrimination. In the classroom and outside, there is freedom to study, to think, to speak, and to learn in an environment that insists upon the free and open exchange of ideas and views.

#### Presidents

- 1818-1833 JEREMIAH CHAPLIN
- 1833-1836 RUFUS BABCOCK
- 1836-1839 ROBERT EVERETT PATTISON
- 1841-1843 Eliphaz Fay
- 1843-1853 DAVID NEWTON SHELDON
- 1854-1857 ROBERT EVERETT PATTISON
- 1857-1873 JAMES TIFT CHAMPLIN

- 6 COLBY
- 1873-1882 HENRY EPHRAIM ROBINS 1882-1889 GEORGE DANA BOARDMAN PEPPER 1889-1892 ALBION WOODBURY SMALL 1892-1895 BENIAH LONGLEY WHITMAN 1896-1901 NATHANIEL BUTLER, IR. 1901-1908 CHARLES LINCOLN WHITE 1908-1927 ARTHUR IEREMIAH ROBERTS 1929-1942 FRANKLIN WINSLOW JOHNSON **JULIUS SEELYE BIXLER** 1942-1960 ROBERT EDWARD LEE STRIDER II 1960-1979 1979-WILLIAM R. COTTER

Accreditation and Memberships Accredited by New England Association of Schools and Colleges and American Chemical Society. Member of The College Board, College Scholarship Service, Association of American Colleges, American Council on Education, National Association of Independent Colleges and Universities, New England Board of Higher Education, Associated Colleges of New England, Council for the Advancement and Support of Education, American Library Association, New England Library Network, Center for African and Afro-American Studies, New England Regional Conference of the National Council for Black Studies, American Institute of Indian Studies, and American Studies Association. Corporate member of American Association of University Women; chapter of American Association of University Professors; New England Small College Athletic Conference. Colby chapter of Phi Beta Kappa founded in 1895. Colby Values and the Commons Plan

Historically, Colby has valued understanding of and concern for others, diversity of thought and culture, open access to campus groups and organizations, and personal and academic honesty. The Commons Plan, adopted in 1984 following a lengthy study by the Trustee Commission on Campus Life, was designed in order to reinforce and amplify these values. Integral to the plan was the decision to withdraw recognition from Colby's several fraternities. The trustees determined that these groups had become disconsonant with Colby's values because they tended to narrow the opportunities and experiences of students rather than expand them, because they were discriminatory against women and were exclusionary by nature, and because fraternity members often engaged in disruptive and undesirable activities such as hazing and pressuring students to join.

The Commons Plan offers a number of new advantages to students. There are four distinct small communities or "commons," each with its own dining facilities and governing units. Housing of all kinds throughout the campus is available on an equal basis to all students, and students play a greater role in the control and governance of the public spaces within the commons, including the dining halls. Out-of-class faculty-student interaction is enhanced and opportunities for the development and expression of individual student leadership come from involvement with the governing bodies and from organizing intellectual and social activities within the commons.

Students may reside within the same residence hall and commons for more than one year, so that friendships can more easily be formed and sustained throughout the college years and afterward.

The new Student Center, built in 1985, serves as a focus for the Commons Plan and as a forum for campus-wide social and cultural activities.

Lovejoy Commons is named for Elijah Parish Lovejoy, a graduate of the Class of 1826, who became America's first martyr for the free press when he was killed by a pro-slavery mob in Alton, Illinois, in 1837. Lovejoy Commons includes Dana Hall and the residence halls of the Hillside Complex and The Heights.

Chaplin Commons, named for Jeremiah Chaplin, Colby's founder and first president who served from 1818 to 1833, is comprised of Averill Hall, West Quad, and Grossman, Treworgy, Pierce, and Perkins-Wilson residence halls.

Johnson Commons is named for Franklin Winslow Johnson, Colby's fifteenth president (1929-42), who inspired the College's move to the Mayflower Hill campus. This commons includes Johnson Hall, East Quad, and the residence halls of Piper, Drummond, and Goddard-Hodgkins.

Mary Low Commons is named in honor of Colby's first woman graduate from the Class of 1875. Included in this commons are the residence halls of Foss, Woodman, Coburn, and Mary Low.

### Campus Life

Access Policy As a matter of College policy, all campus organizations and College-sponsored events are open to the full participation of all members of the Colby community without regard to race, color, sex, sexual orientation, religion, age, parental or marital status, national or ethnic origin, political beliefs, or disability unrelated to job or course of study requirements. Exceptions to this policy may be granted, for compelling reasons only, by mutual agreement of the dean of faculty and the Educational Policy Committee, or, in the case of student-sponsored events, by mutual agreement of the dean of faculty, the dean of students, and the Student Affairs Committee.

Art The Bixler Art and Music Center is the focal point for the College's art program. Continuous exhibitions of works selected from the permanent collection, as well as original and traveling shows, are to be seen in the Jetté Galleries, opened in 1973, and the new Davis Gallery, opened in the fall of 1991, of the Colby College Museum of Art. The permanent collection features American and European painting, sculpture, and graphic art. Special collections are the American Heritage Collection and the American Painters of the Impressionist Period Collection of Edith Kemper Jetté and Ellerton Marcel Jetté, the Helen Warren and Willard Howe Cummings Collection of American Art, the John Marin Collection, the Adelaide Pearson Collection, and the Bernat Collection of Oriental Ceramics and Bronzes. Beginning in 1991 the museum will have on Ioan for one semester every two years the Joan Whitney Payson Collection of Impressionist and Post-Impressionist Art.

The Friends of Art at Colby, organized in 1959, make substantial contributions to the overall art program throughout the year. An advisory council for the museum meets twice a year in New York to consider matters of museum policy and to generate ideas for exhibitions, for continuing the growth of the permanent collection, for enhancing the national recognition of the museum, and for developing cooperative programs among academic museums.

In addition to the studio courses in the regular curriculum, workshops are maintained for extracurricular activities in ceramics and photography.

The Bixler Center also contains painting and sculpture studios and gallery space for exhibitions in the Museum of Art.

**Intercollegiate Athletics** Athletics for men include varsity teams in football, soccer, basketball, hockey, skiing, lacrosse, golf, baseball, tennis, cross-country, indoor and outdoor track, swimming, and squash. There are reserve varsity teams for men in soccer and lacrosse. Rugby is a club sport for men and women. Water polo, crew, woodsmen, bicycling, and sailing are coed club teams.

Varsity teams for women include field hockey, tennis, cross-country, soccer, swimming, ice hockey, basketball, skiing, squash, softball, lacrosse, volleyball, and indoor and outdoor track. Women's reserve varsity teams compete in lacrosse.

The rules that govern intercollegiate sports are those adopted by the athletic conferences in which Colby holds membership. Colby is a member of the New England Small College Athletic Conference, which also includes Amherst, Bates, Bowdoin, Connecticut College, Hamilton, Middlebury, Trinity, Tufts, Wesleyan, and Williams. The College is also a member of the National Collegiate Athletic Association, the Eastern College Athletic Conference, and the Maine Association of Intercollegiate Athletics for Women. Like others in these conferences, Colby deplores the use of illegal drugs, including steroids. Violators will be subject to disciplinary action including but not limited to suspension from athletic teams or from the college. Intramurals/I PLAY I-PLAY (Intramural Participation Leads to an Active You) is a program developed by Colby Students for the entire Colby community. The I-PLAY system offers competition with varied league set-ups. A residence hall league offers coed competition within the Commons System structure. An open league is formed for anyone who is interested in competing on a campus-wide basis. Activities offered throughout the year are soccer, volleyball, touch football, basketball, ice hockey, field hockey, and softball. Other activities are provided depending on student interest and input. Popular items on campus are I-PLAY Championship T-shirts which are awarded each season. Participation by all members of the College community is encouraged.

Throughout the year, outstanding scholars, musicians, and artists visit the campus. Lectures The Winthrop H. Smith Visiting Scholars Program invites a speaker for two days to lecture, talk in classes, and meet with students and faculty. Through a grant from IBM in 1983, the opportunity is provided to the mathematics, physics, chemistry, and administrative science departments, on a rotating basis, to present a lecture of related interest annually. The Clara M. Southworth Lecture examines subjects in environmental design. The Samuel and Esther Lipman Lectureship is devoted to Jewish studies and contemporary Jewish thought. The Ralph J. Bunche Lecture Symposium brings minority speakers to campus to address majority and minority related issues. The annual lecture by the Grossman Professor of Economics delves into current economic issues of significance. The Christian A. Johnson Lectures bring to Colby distinguished economists each year. The Lovejoy Convocation annually honors a member of the newspaper profession "who has contributed to the nation's journalistic achievement." The Kingsley H. Birge Memorial Lecture, established in 1982, seeks to bring to Colby distinguished persons to speak on the human experience, human potential, or humane treatment of human beings. The Spencer Family Fund provides for an annual or biennial lecture on world unity. The Guy P. Gannett Lectures focus on general subject areas not covered by other established lectures at the College. The Phi Beta Kappa Visiting Scholar Program makes available a distinguished scholar for two days to meet informally with students and faculty, take part in classroom discussions, and give a public lecture. In addition to these established lectures, speakers are invited to the campus by the Friends of Art at Colby, student organizations, academic departments, and learned societies.

Music Musical activities converge in the Bixler Art and Music Center, which contains rehearsal and practice rooms as well as the 400-seat Given Auditorium and an electronic music center, equipped for the production of computer-generated sound and other forms of electronic music. Facilities for musical theater and opera are provided in the Performing Arts Center of Runnals Union, while Lorimer Chapel serves as a concert hall for large-scale choral and orchestral concerts. The Gould Music Shell, placed in a natural bowl on the northeast corner of the campus, is available for outdoor concerts.

Students are invited to participate (with or without academic credit) in the Colby Symphony Orchestra, the Colby College Chorale, Wind Ensemble, Jazz Band, and Collegium Musicum (Early Music Group), all under faculty and staff direction.

In addition to numerous concerts by department ensembles each year, concerts by visiting artists of international stature are presented by the Music at Colby series supported by patrons and sponsors and by the Student Association. Members of the Portland String Quartet, who hold appointments as artists-in-residence at Colby, also give concerts each semester and offer a course in chamber music for general students as well as workshops for advanced string players.

**Performing Arts** Colby offers an interdisciplinary major in performing arts, enriched with courses offered by the departments of art, classics, English, modern languages, and music. In

#### 10 CAMPUS LIFE

addition, Colby offers a minor and provides courses for non-majors and opportunities for practical experience in all the areas of theatrical production, dance, and music.

The Strider Theater, the Dunn Dance Studio, a small cellar-theater, art studios, and many spaces for musical performance serve as laboratories for the arts and as performance centers. The Strider Theater has a flexible stage, shop, makeup rooms, and rehearsal space. Light and sound booths over the balcony command a full view of the stage.

**Radio Colby** WMHB-FM is a student-operated station with a Class A noncommercial license from the Federal Communications Commission. From studios in Roberts Union, the station broadcasts throughout the day and evening 365 days a year.

**Religion** The College supports and encourages an ecumenical ministry on the campus. There are Catholic, Episcopal, Jewish, and Protestant chaplains.

**Student Organizations** More than 70 student organizations are chartered by the College. Academic societies are Phi Beta Kappa, Sigma Delta Pi (Spanish), Sigma Pi Sigma (physics), Delta Phi Alpha (German), Pi Sigma Alpha (government), Omicron Delta Upsilon (economics), and Psi Chi (psychology). Student publications include the weekly newspaper, *The Colby Echo*; the yearbook, *The Oracle*; *Pequod*, devoted to art, literature, and photography; and *The Review*, a journal of student essays, fiction, and art.

Service organizations are The Bridge (Bi-sexual, Gay and Lesbian Society), Colby Emergency Response, Colby Friends (Big Brother, Big Sister), and the Colby Volunteer Center.

Other groups include Balum (Rainforest Awareness), Bike Club, Biology Club, Borborygmus (poetry, art), Broadway Musical Revue, Chronicle: Colby in Depth, Circle K, Coalition for Political Action, Coffeehouse Association, Colby Comedy Support Group, Colby Dancers, Colby Democrats, Colby Eight, Colbyettes, Colby Handbell Ringers, Colby Military Affairs, Colby Outdoor Orientation Trips (COOT), Colby Pro-Choice Coalition, The Colby Response, Colby Safe Escort, Colby Speech Council, Colby Spirit Squad, East Asian Cultural Society, Environmental Council, Fencing Club, French Club, Geology Club, German Club, Human Rights Group, International Club, Lorimer Chapel Choir, Men's Group, Men's and Women's Rugby, Off-Campus Society, Outing Club, Pause Café-Café International, Peer Health Facilitator, Photography Club, Pottery Club, Powder and Wig, Pre-Med Club, Republican Club, Rowing Club, Russian Club, Sailing Club, Senior Arts Exhibition, SOAR (Student Organization Against Racism), Spanish Club, Stu-A Films, Student Affiliates of the American Chemical Society, Student Alumni Association, Student Arts Committee, Student Organization for Black and Hispanic Unity (SOBHU), Table Tennis Club, Tuxedo Junction, Volleyball, Water Polo, WMHB, Women's Group, and Woodsmen's Teams.

Religious organizations are B'nai B'rith Hillel, Interdenominational Chapel Steering Committee, Colby Christian Fellowship, and the Newman Club.

There are other clubs and societies described under appropriate catalogue headings. In addition, each class acts as an organization, with elected officers, as do the Commons Councils. Organizations and most activities, including film, lecture, and concert series, are funded through the Student Association. Also, students are appointed by the Student Association to serve on College committees.

### The Library

The libraries have installed automated catalog and loan systems. On-line access to the College's large bibliographic data base is available from terminals throughout the library and elsewhere on the campus. Computerized access to indexes of files of journals, newspapers, and government documents is available through several CD-ROM workstations. Information about library holdings at Bates, Bowdoin, and the University of Maine is also available on line.

The library furnishes printed and audiovisual material for assigned and recreational reading, reference, research, and independent study. The main building is open from early morning until late at night during the academic year, and mornings and afternoons each weekday in summer. Study areas and a computer room with eight terminals are open 24 hours a day. Miller Library houses the humanities and social science collections, College archives, and special collections.

An open-stack system allows browsing through the collection of over 600,000 items. The library has over 2,000 current periodicals, with strong retrospective runs, and daily newspapers from this country and abroad. Miller Library is a selective depository for United States government documents. In addition, on file are specialized types of material such as microfilms of newspapers, periodicals, and documents, recordings, films, and videotapes. The library is a member of the New England Library Network.

There are two branch libraries. The Bixler Center has the Ambrose Coghill Cramer Room for the library of fine arts and music and has a newly equipped listening facility for over 9,000 sound recordings. The science collections are housed in the Allyn-Smith Science Library in the Keyes Building.

Special collections of first editions and manuscripts in Miller Library have achieved international recognition. The Edwin Arlington Robinson Memorial Room, named for the famous Pulitzer Prize-winning Maine poet, contains his books, manuscripts, letters, and memorabilia. The Thomas Hardy Collection is one of the most extensive in the country. Other authors represented in the Robinson Room include A. E. Housman, Sarah Orne Jewett, Kenneth Roberts, Henry James, Willa Cather, John Masefield, William Dean Howells, and Thomas Mann.

The John and Catherine Healy Memorial Room contains the James Augustine Healy Collection of Modern Irish Literature, with numerous inscribed copies, manuscripts, and holograph letters of William Butler Yeats, Sean O'Casey, James Joyce, George Bernard Shaw, and many others. The Healy Collection has 6,000 primary and critical sources representing the Irish Literary Renaissance, 1880-1940.

The Alfred King Chapman Room houses the College archives, which hold over 4,000 manuscript files pertaining to Colby graduates, faculty, and staff dating from 1813 to the present. Also included is an extensive collection of books by Colby graduates and faculty.

Audiovisual Center The audiovisual center in the Miller Library provides media services for the College community. In addition to offering the traditional equipment delivery and loan services, the center also produces educational materials and provides instruction in many media-related areas. Audiovisual maintains a full complement of equipment, from overhead projectors to portable video recorders.

### **Career Services**

Colby's commitment to the liberal arts embraces the firm belief that the breadth and quality of a Colby education should be extended to include an equally broad choice of meaningful and rewarding career opportunities. Located in Roberts Union, the Office of Career Services strives to acquaint students with career options, offers insight into various professions, and assists in preparation for the actual career search. Students, parents, and alumni are invited to visit the office to discuss career concerns, offer suggestions, and avail themselves of the facilities.

The staff works with academic advisers and other members of the faculty and staff to assist undergraduates in the selection of courses and experiential options that best meet each student's individual interests and needs. Students considering careers in medicine, veterinary medicine, and dentistry are advised to meet with a member of the professional-preparation committee for these areas as early as possible in the first year, and those interested in law and business should see the director of career services.

The computer room and the career library, which includes extensive information on jobsearch techniques, current employment openings for permanent and summer positions, internships, and graduate-degree programs, are open weekdays, including evenings, and Sunday afternoons.

Students are encouraged to make an appointment to encounter SIGI (System of Interactive Guidance) PLUS, a computer program that provides interest testing and value determination as well as information about hundreds of professions. Workshops and individual counseling on career exploration, résumé writing, and interviewing techniques can be as helpful to the underclass student seeking a summer job or January internship as to the senior seeking a permanent career opening. In addition, a lifetime reference file may be opened at any time, and a newsletter is distributed throughout the campus on a regular basis, listing current activities and programs as well as career-related opportunities.

Specific programs for seniors include a recruitment program, which brings representatives from graduate and professional schools to the campus in the fall and from corporations and government-service organizations in the spring. Consortium programs with other institutions allow for the opportunity to interview with a variety of additional firms and organizations at single locations in Bangor, Portland, Boston, and New York City. Information and applications for the Graduate Record Examinations, Graduate Management Admission Test, Law School Admission Test, National Teachers Examination, and the Foreign Service Examination can be obtained by seniors in the office, and all but the last two are administered at Colby at least once each year.

With the generous support of Colby graduates and parents of current students, a broad network of persons in various professions and widespread geographical locations has been established to assist students and alumni in career exploration. Parents and alumni have agreed to conduct informational interviews, be hosts for on-site visits, sponsor internships for January and the summer, and provide housing for interns and job seekers in their areas. Information on these opportunities can be obtained from the in the Office of Career Services. More specific information on January internships and other field experience options is available in the Office of Off-Campus Programs.

### Admission

Colby College admits students as candidates for the degree of bachelor of arts. Admission is highly selective, and evaluation is based on data concerning academic achievement and ability, as well as qualities of intellectual promise, interest and excitement in learning, character, and maturity.

The College actively seeks applicants who have special qualities or talents to contribute to the Colby community, as well as those who represent diverse geographical, racial, religious, and economic backgrounds. Such candidates are expected to be within acceptable ranges of academic ability and preparation.

The quality of a candidate's preparation is judged by the academic record, references from school administrators and teachers, and results of tests administered by The College Board or by the American College Testing Program.

To ensure a common educational base, a minimum of 16 academic preparatory units is strongly recommended, including four years of English, at least three of a single foreign language, three of college preparatory mathematics, two of history or social studies, two of laboratory science, and two years of other college preparatory electives.

Colby College supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status, in order to provide reliable assurance of the quality of the educational preparation of its applicants for admission.

#### **Application Schedule**

November 15: Deadline for filing applications for fall option early decision admission and financial aid. Notification: December 15.

December 1: Deadline for filing applications for midyear transfer admission. Notification: early January.

January 1: Deadline for filing applications for winter option early decision admission and financial aid. Notification: February 1.

January 15: Deadline for filing applications for regular admission and financial aid.

March 1: Deadline for filing transfer applications and financial aid requests. Notification: May 1.

Early-April: Notification of action by admissions committee and of financial aid awards to regular freshman applicants.

May 1: Admitted regular applicants confirm intention to attend Colby by payment of \$200 advance tuition deposit.

Interviews Interviews, though not required, are recommended and are available on campus from May 1 to January 15. Appointments may be scheduled between 8:45 a.m. and 3:45 p.m. on weekdays, and on most Saturday mornings in the fall.

Interviews with alumni can be arranged for students who are unable to visit the campus and who would like additional personal contact and information about the College.

**Campus Visits** A visit to Colby is encouraged. Guides are normally available at the Admissions Office on weekdays, and tours may be arranged on many Saturday mornings. A list of motels near the campus is available from the Admissions Office.

High school seniors who wish to spend a night on campus may do so through the Colby Host Program. The program operates five days a week (Sunday through Thursday) throughout the academic year, with the exception of examination and vacation periods. Requests for accommodations through the Host Program should be directed to the Admissions Office at least two weeks prior to the visits. Accommodations are limited to one night.

#### 14 ADMISSION

For those driving, Colby is located near exit 33 of I-95. Waterville also may be reached by bus, by air to nearby Augusta, or by airport limousine from the Portland Jetport.

**Tests** Colby requires either The College Board Scholastic Aptitude Test (SAT) and three achievement tests—one of which must be English Composition, with or without essay—or the ACT tests. A foreign language achievement test is recommended for students seeking to fulfill the College's language requirement by scoring 60 or better. All required tests must be taken no later than January of the senior year. Early decision candidates must take these tests earlier in theirsenior year or in their junior year. Applicants must request that test results be sent to Colby directly from the appropriate testing agency. Students taking The College Board tests should contact The College Board ATP, P.O. Box 592, Princeton, New Jersey 08540 (or P.O. Box 1025, Berkeley, California 94701, for those living in Montana, Wyoming, Colorado, New Mexico, or points farther west). Students taking ACT tests should make requests to P.O. Box 414, Iowa City, Iowa 52243.

Advanced Standing Colby participates in the Advanced Placement Program of The College Board, providing academic credit for students qualified for advanced standing. Those interested take The College Board advanced placement tests and have the results submitted to Colby for evaluation. Students scoring four or five receive credit from the College. Scores of three and below are evaluated by the appropriate academic department. Students who earn between 15 and 29 hours of advanced placement credit may, upon application, use that credit to count toward one semester of the eight semester residency requirement. Students who earn 30 hours or more may, upon application, count those credits toward two semesters of the eight semester residency requirement.

Colby also recognizes the International Baccalaureate and offers advanced placement and credit based on individual Higher Level examination results as well as performance on the full IB Diploma program. At the discretion of individual academic departments, advanced placement and credit may be earned for scores of 5, 6, and 7 on Higher Level examinations. Students may earn up to a full semester of standing in this manner. A full year of credit may be earned for an IB Diploma point total of 34 or better, assuming all examination scores are 4 or better and no Higher Level examination score is below 5.

Finally, students who receive an A or B (superior level) on A-levels or comparable scores on the Leaving Certificate (Ireland), the Arbitur (Germany), or the Baccalaureate (France) may be eligible for credit and advanced placement. Credits will be granted in consultation with the appropriate department and only after the student has shown satisfactory progress during his or her first semester at Colby.

**Early Admission** A small number of students are admitted without completing the senior year of secondary school. This is done only with the recommendation of the secondary school. Considerations of academic and personal maturity are important to the candidate and to the College in earlier-than-usual admission.

Midyear Admission Each year more sophomore and junior Colby students study off campus during the second semester than during the fall, and 30 to 40 spaces for incoming students usually become available at the beginning of the January term. A student who applied for admission in the fall semester may be offered admission for midyear. For these students Colby offers three fall-semester-abroad options, which are described on page 0. A student who participates in one of the College's first-semester-abroad programs enters Colby with a group of friends acquired through the program and with enough credits to progress toward the degree at the same pace as his or her classmates.

Transfer Students and Veterans First consideration in admission is for freshman students,

but some transfer students are accepted each year. Admission by transfer is open to those with strong academic and personal records from accredited colleges or universities. Transfer application forms may be obtained from the Admissions Office.

Credits from accredited institutions are generally accepted for courses comparable to those offered at Colby in which grades of C or better are received. No more than 60 transferable semester credit hours may be applied toward a Colby degree.

Veterans may request advanced standing consideration for completion of service schools or USAFIcourses in advance of matriculation. Credit is not granted for military service or College Level Educational Program tests.

**Health Certificate** No student will be allowed to register, attend classes, or participate in any campus activities, includingCOOT (Colby Outdoor Orientation Trips), until a health certificate has been received and approved by the College Health Services. Verification of a physical examination is required, as well as immunization for polio, tetanus, and diphtheria. Verification of prooffor two immunizations for mumps, rubella, and rubeola is also required. In compliance with Maine state law, Colby requires such proof of immunization as photocopies of standard immunization cards and/or pages from a physician's medical record which must be signed or stamped by the health care provider who administered the immunization. Photocopies of lab slips of titers proving previous disease may be submitted if applicable. A tuberculin test is required six months prior to matriculation. All of this information must be received by July 15 at the latest.

**Nonmatriculated Students** Application to enroll as a nonmatriculated student must be made to the dean of admissions, who has the responsibility for the admission of all students. Registration in individual courses requires the approval of the course instructor, and may be limited; matriculated students have priority in admission to courses with limited enrollments.

All persons seeking to take courses for credit must present evidence that they are qualified to pursue the intended courses, and must pay the established fee. A limited number of gifted Waterville area secondary school students may be recommended by their schools to take a course. Adults from the immediate Waterville area who are not degree candidates may qualify to take courses at one half the usual fee or may audit courses at no charge.

Persons wishing to enroll as auditing students must also apply to the dean of admissions, and are referred to the section "Auditing Courses" elsewhere in this catalogue.

International Students Colby has traditionally encouraged the enrollment of students from other countries and is actively engaged in programs of international cooperation and exchange.

Applicants to Colby must be able to understand and be understood in English. Oral and writing skills are essential for successful work at Colby. Colby requires the Scholastic Aptitude Test (SAT) and three achievement tests (if the tests are offered in a student's home country). In addition, applicants whose native language is not English and who have attended a school in which the medium of instruction is not English are required to take the Test of English as a Foreign Language (TOEFL). Arrangements may be made to take these examinations in various centers throughout the world by writing to The College Board ATP, P.O. Box 6155, Princeton, New Jersey 08541-6155, U.S.A. To ensure that the results are sent promptly to Colby, please use the Colby College Examination Code No. 3280. United States embassies and consular offices can provide pertinent information about these examinations. These offices often have booklets describing the tests, and may have practice tests for applicants' use.

Financial aid for international students is available in limited amounts. Applicants for financial aid should complete the Foreign Student's Financial Aid Application and Declaration Form, which, upon request, is sent with Colby admissions materials. All applications are due in the Admissions Office, with supporting documents, by January 15.

An associate dean of students is responsible for intercultural activities and serves as a special adviser to international students.

### Orientation

From the time of admission until they arrive on campus, new students are invited to make use of a "hot line" to the College to get answers to any questions they may have. An on-campus orientation program for first-year and other new students is held just before the beginning of each new semester. The program includes an introduction to the intellectual and social life of the College, meetings with faculty and staff advisers, and placement examinations. Prior to the orientation, first-year students may participate in COOT (Colby Outdoor Orientation Trips), conducted by upperclass students, faculty, and staff members.

**Placement in Mathematics** A mathematics placement questionnaire should be completed prior to registration by all students who intend to take Mathematics 101, 119, 121, 122, or 123. The purpose of this questionnaire is to indicate the course most appropriate for the individual student. Final decision on placement rests with the chair of the Department of Mathematics and Computer Science.

First-year students who intend to register for a "no prerequisite course" (Mathematics 111, 112, 117, or 118) need not complete this questionnaire.

First-year students who intend to register for Mathematics 231, 253, 262, or 274 should consult with their advisers and with the chair of the Department of Mathematics and Computer Science.

**Placement in Foreign Languages** The College language requirement for 1991-92 is met at entrance by a score of 60 or more on The College Board language achievement test.

Students wishing to continue the study of a foreign language at Colby are encouraged to take The College Board achievement test in that language. The results are used to place the student at the appropriate level. If a student has not taken The College Board test and wishes to continue studying a language, he or she will be placed on the basis of a required placement exam given during orientation for new students only. Students whose College Board scores are more than a year old at the time of registration are also required to take the Colby placement exam.

Students who have had two or more years of language study may enroll in the first-semester course of that language only if the appropriate department determines, on the basis of The College Board test or Colby's placement test, that their preparation is not adequate for a more advanced level.

Placement for students who have scored 60 or above on The College Board language achievement test is done by consultation with the department.

### Student Fees

#### Annual Basic Charges 1991-92

	Sem. I	Sem. II	Total
Tuition	\$7,855	\$7,855	\$15,710
Board	1,300	1,300	2,600
Room	1,375	1,375	2,750
General Fee	375	375	750
	\$10,905	\$10,905	\$21,810

Calendar of Payments 1991-92*	On Campus	Off Campus
Upon Acceptance for Admission: Admission deposit- new students only.	\$200	\$200
April 1: Attendance deposit for first semester-return- ing students only.	\$200	\$200
August 1: One half of annual basic charges, less admis- sion or attendance deposit.	\$10,705	\$8,030
November 1: Attendance deposit for second semester- returning students only.	\$200	\$200
January 1: One half of annual basic charges, less ad- mission or attendance deposit.	\$10,705	\$8,030

\*Full year payment for the Caen, Cork, and Salamanca programs is required by August 1. See specific brochures or the Colby *Catalogue* for applicable charges.

#### Deposits

Admission Deposit for All New Students: A nonrefundable deposit of \$200 is due on or before the date of confirmation of intention to attend. This deposit is credited against the charges for the student's initial semester of enrollment and will be forfeited if the student does not enroll.

Attendance Deposits: Returning students are required to pay a \$200 attendance deposit prior to each semester. The first semester deposit is due April 1 and is nonrefundable after July 1. The second semester deposit is due November 1 and is immediately nonrefundable. The attendance deposit is credited against the charges for the respective semester. Student account balances must be paid in full before the attendance deposit can be applied as such. For a student who does not enroll, the deposit will be held as a credit for one year, after which it will be forfeited. A student who does not pay an attendance deposit by the due date will not be permitted to select housing or preregister for courses for the coming semester. The admission deposit satisfies this requirement for new students.

#### **Basic Charges**

*Tuition:* All matriculating students are required to enroll for at least nine credit hours each semester at the basic tuition rate of \$7,855 per semester. Exceptions are made by the dean of admissions in the case of non-traditional students and by the dean of students in certain cases of regular students with extenuating circumstances which prohibit themfrom carrying a normal course load. In these exceptional cases, students may be charged on a credit hour basis at the rate of \$600 per credit hour.

With permission of the dean of students, seniors needing fewer than nine hours in their final semester may take only that number of credit hours necessary to meet their graduation requirement. In such cases, however, the full basic tuition of \$7,855 per semester will be charged.

#### 18 STUDENT FEES

*Board*: The College offers a board plan of 21 meals per week, required of all students living on campus, and is also available to off-campus students. Off-campus students may also purchase five lunches a week on a semester basis.

*Room*: Students are expected to occupy College housing facilities to the full extent of their availability. Other arrangements may be made only with specific approval of the dean of students. Residence hall reservations are made through the Office of the Dean of Students.

General Fee: The general fee is charged to all matriculating students except those in the nonresidential degree program. Included in the general fee is an allocation for the Student Association and funding of College health services. There are no additional fees for staff services in the student health center or for the student health-insurance plan that the College provides as part of its health-services package to all students who pay the general fee.

#### **Miscellaneous** Charges

Applied Music: A student receiving musical instruction under the applied-music program is charged a fee for a one-credit course and for a two-credit course. Music majors will be exempt from this charge.

January Program: A January Program that requires extensive travel, special materials, or highly specialized outside instruction carries a fee calculated to reflect the costs of the individual program. Such fees are published annually in the January Program brochure.

Colby in Caen/Colby in Salamanca: In lieu of the regular charges for tuition, room, board, and general fee, annual fees of \$16,000 are charged for these programs. Because of the nature of these programs, separate deadlines and deposits apply. Details are available in the Colby in Caen and Colby in Salamanca brochures.

Colby in Cork: In lieu of the regular charges for tuition, room, board, and general fee, an annual fee of \$17,000 is charged for this program. Information on deadlines, deposits, and other program details is available in the Colby in Cork brochure.

Cuernavaca/Dijon/Lübeck/London Semesters: For students participating in one of these programs, the regular basic charges of \$10,905 per semester apply. Further information is available from the Admissions Office.

Fines: Fines are charged to a student's account for: failure to register automobiles, parking violations, late return of library books, checks returned as uncollectible, and for disciplinary actions.

Damage to or Loss of College Property: Liability for damage or loss of College property located within individual residence hall rooms lies with the resident(s) of the room. When damage or loss of College property occurs in residence hall common areas (e.g., lounges, hallways, lobbies, bathrooms), Residential Life will make every effort to identify the individuals responsible and to bill them. In cases where Residential Life determines that responsibility lies with the residents of a specific section of a residence hall, those students will be billed. When the individuals responsible for damage or loss of College property cannot be identified, the cost of repair or replacement is accumulated by the residence hall. At the end of each semester, Residential Life, in cooperation with the Physical Plant Department, determines the cost of all unidentified damage and loss of College property and bills the residents of each residence hall on a pro rata basis. Any conflicts regarding assignment of responsibility may be directed to the Judicial Board.

**Payment of Bills** Bills for basic charges are normally mailed two to four weeks before they are due. Each student receives a statement of account at registration. Additional statements are furnished monthly for accounts with outstanding balances due.

Before students are permitted to register, accounts must be paid or satisfactory arrangements made with the Business Office. Deferments are not granted for pending loans or scholarships. It is the student's responsibility to ensure that these matters are resolved prior to registration or to pay the bill in full and then seek a refund when the loan or scholarship is finally disbursed. Payments are applied against charges in the order in which the charges appear on the student's account.

Students having unfulfilled financial obligations of \$500 or more will not be allowed to transfer credits to other institutions nor obtain transcripts or grades. Exceptions will be made for seniors wishing to obtain transcripts for graduate school enrollment.

Late Payment Fees A late payment fee of 1.5% of an unpaid balance of \$500 or more will be assessed at the first of each month for as long as such a balance remains unpaid. A balance must be 30 days old to be assessed a fee. Assessment dates for September and February will coincide with registration dates rather than the first of those months. In order to avoid late payment assessments, please allow ample time for mail delivery to Colby's Boston bank as Colby is not responsible for delays caused by mail delivery.

Loan and Payment Plans The College makes available a number of loan and payment plans. Those interested in such plans may contact the Financial Aid Office.

**Refunds** In cases of voluntary withdrawal during the period for which a student has been billed, a student may be eligible for a refund of basic charges as follows:

First two weeks of classes	80%
Third and fourth weeks of classes	60%
Fifth week of classes	40%
Sixth week of classes	20%
Thereafter	

A pro rata refund of the basic charges will be made for a student who withdraws upon advice from the College physician. This refund policy applies to the regular academic program on campus and the Cuernavaca, Dijon, Lübeck, and London semesters.

Students who withdraw voluntarily or upon the advice of a physician from the Caen, Cork, or Salamanca programs may be eligible for refunds of the program fees as follows:

First two weeks of the program	75%
Third through sixth week of the program	50%
Seventh through fourteenth week of the program	
Thereafter	0%

When a student is required to withdraw because of unsatisfactory conduct including academic dishonesty, no refund will be made. A refund will not be made until the withdrawal/ leave process established by the dean of students is completed.

A refund of basic charges or program fees will be made to the source of payment in the following order of priority: (1) to federally funded scholarship and loan programs in accordance with the refund regulations pertinent to those programs, (2) to need-based Colby scholarship and student loan programs, (3) to outside scholarship programs, (4) to the student and/or parents.

A refund of raw food costs for the period of the January Program is made to a student who has completed the first semester with a board contract and who does not live or eat on campus during the January Program. A request for this refund must be made in the Business Office by the end of the first semester. The refund will be credited to the student's account at the beginning of the second semester. No other refunds are made for students who elect not to do an on-campus January Program.

General Information The College Business Office is located on the first floor of the Eustis Administration Building. Staff members are available on weekdays between 9:00 and 4:30 to answer questions about student accounts and College financial policies. Questions concerning

#### 20 STUDENT FEES

student and parent loan applications, financial aid, and other financing options should be directed to the Office of Student Financial Aid.

### Financial Aid

Colby offers financial aid to admitted students who demonstrate need. In order to ensure equal access and opportunity for students from all economic backgrounds, Colby awards over 8.5 million dollars annually in grants, loans, and campus employment to approximately 615 students, or 35 percent of the enrollment. The average aid package in 1990-91 was approximately \$13,000. In addition to Colby's own programs, these awards include the full range of federal and state financial aid programs, including Pell Grants, Supplemental Grants (SEOG), Perkins Loans (formerly National Direct Student Loans), College Work-Study, and Stafford Loans (formerly Guaranteed Student Loans).

As a member institution of the College Scholarship Service (CSS), Colby requires all aid applicants to submit the Financial Aid Form (FAF) to the CSS, Princeton, New Jersey, before February 1. On the basis of the FAF, parents' and students' tax returns, and the Colby aid application, the College determines need within the context of Colby policy and federal regulations.

Early decision applicants for financial aid must file both an institutional application and the Early Version of the FAF before November 15 for Round 1 Early Decision candidates and before January 1 for Round 2 Early Decision candidates.

To provide flexibility, Colby also accepts two outside payment plans. Students who seek more detailed information may write for the pamphlets "Financial Aid and Financing Options at Colby College" and "Paying for a Colby Education" or contact the director of financial aid.

Parents and students may review information in the Financial Aid and Career Services offices concerning scholarships offered by non-Colby organizations, including VA programs for dependents of veterans. ROTC scholarships are also possible if the student participates in ROTC through the cross-registration program with the University of Maine.

As stated more fully in the section on "Academic Procedures" in this catalogue, the Committee on Academic Standing reviews the records of all students at the end of each semester to determine if each is maintaining satisfactory academic progress. Decisions of this committee govern eligibility for financial aid in accordance with federal regulations.

Committee decisions of dismissal may be appealed. When students have been readmitted after academic dismissal, federal Title IV assistance (to a maximum of ten semesters) will be awarded on a cumulative basis according to Colby's published funding priorities for financial aid. All standards are in accordance with AACRAO and NASFAA guidelines for self-regulation with respect to satisfactory progress.

### General Regulations

All students are responsible for knowledge of the regulations in the Student Handbook and in the annual catalogue. The handbook covers academic, administrative, and social regulations.

The College reserves the right to dismiss any student whose presence its officers believe to be detrimental to its general welfare.

Although authority regarding discipline is the ultimate responsibility of the dean of students, most cases requiring discipline of students are turned over by the dean to a judicial board comprised of students and faculty. The regulations of the board and the rights of students appearing before the board are described in the *Student Handbook*.

**Behavior** The administrative officers of the College have a responsibility for maintaining and encouraging an atmosphere on campus consonant with the College's function as a community of students and teachers.

The trustees have delegated to various sectors of the College, including the Student Association and the commons, extensive autonomy in the conduct of student affairs. Students retain the right to organize their own personal lives and behavior within the standards agreed upon by the College community, so long as they do not interfere with the rights of others or with the educational process.

The right of free speech and the open exchange of ideas and views is essential, especially in a learning environment, and Colby vigorously upholds these freedoms. Similarly, the College is committed to maintaining a community in which persons of all ethnic groups, religious affiliations, and nationalities are welcome. The College will not tolerate racism, harassment, including sexual harassment, or intimidation of any kind; any student found guilty of such actions or of interfering with these goals will be subject to civil prosecution as well as suspension or expulsion from Colby.

Effective Commencement 1984, the College withdrew its recognition and support of its social fraternities and sororities and the trustees mandated that no rushing, pledging, or initiating of new members of fraternities or sororities would be permitted after January 1984. Students who pledge, or who invite pledging in, haze, or who perpetuate any fraternity or sorority will be suspended for at least one year and may be subject to additional penalties that could include expulsion.

The College has always encouraged responsibility in the use of alcoholic beverages. Moreover, federal and state laws concerning alcohol and drugs must be observed. State of Maine laws forbid possession of alcohol by underaged persons. Any student found using or supplying illegal drugs, including steroids, or in possession of drug paraphernalia is subject to disciplinary action, including suspension or expulsion. The College wishes to help those who have substance abuse problems and confidential counseling is available to those who will discuss treatment and participate in a treatment program.

**Health Policy** Health professionals in the Colby College Health Services treat students on the same basis as community professionals treat the patients under their care.

The College feels that the best interests of students are served by having full medical and psychological counseling and treatment from professionals thoroughly informed about personal and family history.

The College respects the rights of these professionals to use their judgment in meeting the health needs of students.

Upon recommendation of the medical director or director of counseling services, the College reserves the right to require a student to withdraw for medical or psychological reasons. If, in the opinion of either the counseling service or medical director, a student becomes unable to carry on normal student functions, or when his/her presence is or may become a hazard to that student or others, withdrawal will be required. Following any medical or psychological withdrawal, a recommendation from the student's physician or psychologist to the appropriate professional is required before the student is readmitted to the College.

The officers, faculty, and medical and counseling staff of the College reserve the right to refuse to divulge information regarding a student's psychological or psychiatric condition or matters of an intimate nature without the student's authorization.

Housing and Student Living Students are housed in four Residential Commons, accommodating between 300-500 students each. Individual residence hall sizes range from 30 to 200 students per building. All class years are housed in each building.

Except for some area students who may live at home with the permission of the College, all first-year students are required to live in College housing as assigned by the Dean of Students Office. Resident students are required to subscribe to the on-campus board plan. The College has charge of the maintenance and security of its buildings. A limited number of upperclass students are permitted to live off campus, with permission from the dean of students.

**Student Records** Colby complies with the Family Educational Rights and Privacy Act of 1974, which establishes the right of students to inspect and review their education records and provides guidelines for the correction of inaccurate or misleading data. Complete guidelines used by the College for compliance with the act are printed in the *Student Handbook* and may be obtained at the Dean of Students Office.

## 2 Academic Program

The Colby Plan 27

Academic Requirements 28

Academic Honors 35

Academic Programs 36

Academic Procedures 42

Courses of Study 46



### The Colby Plan

In the spring of 1989, the faculty adopted a series of precepts, endorsing basic educational principles already well established at Colby, as the latest step in ongoing curriculum reform at the College. These precepts reflect the College's sense of the principal elements of a liberal education and serve as a guide for making reflective course choices and for measuring educational growth. In keeping with a commitment to lifelong learning, it is expected that they also will provide a broad framework for education beyond college.

The precepts, which the College believes are at the heart of a liberal arts education, are: • to develop one's capability for critical thinking, to learn to articulate ideas both orally and in writing, to develop a capacity for independent work, and to exercise the imagination through direct, disciplined involvement in the creative process;

• to become knowledgeable about American culture and the current and historical interrelationships among peoples and nations;

• to become acquainted with other cultures by learning a foreign language and by living and studying in another country or by closely examining a culture other than one's own;

• to learn how people different from oneself have contributed to the richness and diversity of society, how prejudice limits such personal and cultural enrichment, and how each individual can confront intolerance;

to understand and reflect searchingly upon one's own values and the values of others;

to become familiar with the art and literature of a wide range of cultures and historical periods;

• to explore in some detail one or more scientific disciplines, including experimental methods, and to examine the interconnections between developments in science and technology and the quality of human life;

• to study the ways in which natural and social phenomena can be portrayed in quantitative terms and to understand the effects and limits of the use of quantitative data in forming policies and making decisions;

• to study one discipline in depth, to gain an understanding of that discipline's methodologies and modes of thought, areas of application, and relationship to other areas of knowledge;

• to explore the relationships between academic work and one's responsibility to contribute to the world beyond the campus.

Students are urged to embark on a course of lifelong learning by pursuing these objectives in their coursework and through educational and cultural events, campus organizations, and service to others, both on campus and in the broader community.

### Academic Requirements

Graduation Requirements To qualify for the degree of bachelor of arts, a candidate must meet specific requirements in *residence*, *quantity*, *quality*, *distribution*, *major*, *and January Program*. Only those seniors who have met all graduation requirements are eligible to participate in the commencement exercises. Students, who, because of extreme extenuating circumstances, find themselves unable to graduate with their class, may appeal to the Administrative Committee of the College to allow them to march with their class and receive an empty diploma cover.

The following statements define the graduation requirements.

Residence Requirements Candidates for the degree must earn in residence at least 60 credit hours. They must be resident students at Colby for at least four semesters, including the senior year. A resident student is defined as a full-time student taking at least 12 credit hours and paying tuition charges at the semester rate.

Credits earned at another institution while concurrently registered at Colby may not be applied toward graduation requirements.

Quantity Requirements A minimum of 120 credit hours earned in at least eight semesters of full-time college-level study.

Credit Requirements Among the 120 credit hours required for graduation, up to 15 may be earned in courses taken on a satisfactory/unsatisfactory basis, and up to 15 may be field experience credits.

Quality Requirements A 2.0 cumulative grade point average.

For each credit hour, a mark of:

- A earns four points.
- B earns three points.
- C earns two points.
- D earns one point.

Each plus mark earned is:

- .3 quality point per credit hour added. Each minus mark is:
- .3 quality point per credit hour deducted.

#### Distribution Requirements Effective with the Class of 1995

No part of any requirement can be satisfied with the satisfactory/unsatisfactory option or field experience credits.

English Composition: English 115.

Foreign Language (modern or ancient): This requirement may be met in one of three ways:

(1) By attaining before entrance a score of 60 in a College Board foreign language achievement test or in the Colby language placement test taken during orientation.

(2) By successfully completing Colby's intensive language program in Cuernavaca, Mexico; Dijon, France; or Lübeck, Germany. Open to first-year students, the programs in Cuernavaca and Dijon are offered in the fall semester, the Lübeck Program in the spring semester.

(3) By successfully completing a sequence of modern or classical language courses terminating with a course numbered above 126 in a modern language, or Greek 131 or Latin 131. Students will be placed in the sequence according to ability.

Transfer students who have studied a foreign language not taught at Colby may fulfill the

requirement by presenting evidence of having completed at an accredited institution the intermediate level of that language.

For foreign students whose native language is not English, knowledge of that language will be recognized as fulfilling the requirement. Confirmation from the chair of the appropriate language department must be filed with the Office of the Registrar. In certain cases, testing by the department may be required.

Areas: Students are required to take one course in each of Areas I, II, III, IV, and VI, and two courses in Area V. Normally, students will be expected to complete these requirements during their first three years. Lists of courses fulfilling each area can be obtained from the Registrar's Office.

Area I ARTS: Courses in the history, theory, and/or practice of the creative arts.

Area II HISTORICAL STUDIES: Courses that investigate human experience by focusing on the development of cultures and societies as they evolve through time.

Area III LITERATURE: Courses that focus on literary works of the imagination, and/or written texts in which ideas and creative or esthetic considerations play a crucial role.

Area IV QUANTITATIVE REASONING: Courses that focus on quantitative or analytic reasoning about formally defined abstract structures.

Area V NATURAL SCIENCES: Courses that focus on the understanding of natural phenomena through observation, systematic study, and/or theoretical analysis. At least *one* course taken to satisfy Area V must contain a substantial laboratory component.

Area VI SOCIAL SCIENCES: Courses that focus on theoretically and methodologically directed inquiry into various aspects of human behavior and interaction.

Diversity: Students are required to take one course centrally concerned with how the diversities among peoples have contributed to the richness of human experience. Courses that may be taken to fulfill the requirement are those that (a) focus on history, perspectives, or culture of non-Western peoples or a culture whose origins lie outside of the European traditions; (b) focus on issues and/or theories of ethnicity, gender, or class as these may be found anywhere in the world; or (c) examine the nature, history, and workings of prejudice as experienced by any group. [Note: This requirement may be met by courses that satisfy other requirements.]

Physical Education: One year (four seasons) of physical education is required.

#### Distribution Requirements for All Other Classes

No part of any requirement can be satisfied with the satisfactory/unsatisfactory option or field experience credits.

All-College Requirements

English Composition: English 115.

Freshman Seminar: For first-year students entering in 1987 and 1988, a freshman seminar is required.

Foreign Language (modern or ancient): This requirement may be met in one of three ways:

(1) By attaining before entrance a score of 60 in a College Board foreign language achievement test or in the Colby language placement test taken during orientation.

(2) By successfully completing Colby's intensive language program in Cuernavaca, Mexico; Dijon, France; or Lübeck, Germany. Open to first-year students, the programs in Cuernavaca and Dijon are offered in the fall semester, the Lübeck Program in the spring semester.

(3) By successfully completing a sequence of modern or classical language courses terminating with a course numbered above 126 in a modern language, or Greek 131 or Latin 131. Students will be placed in the sequence according to ability.

Transfer students who have studied a foreign language not taught at Colby may fulfill the requirement by presenting evidence of having completed at an accredited institution the intermediate level of that language.

For foreign students whose native language is not English, knowledge of that language will

be recognized as fulfilling the requirement. Confirmation from the chair of the appropriate language department must be filed with the Office of the Registrar. In certain cases, testing by the department may be required.

Physical Education: One year (four seasons) of physical education is required.

#### **Division Requirements**

A minimum of six credit hours in each of the divisions of humanities, social sciences, and natural sciences. Three of the credit hours in the natural sciences must involve laboratory experience in appropriate courses in astronomy, biology, chemistry, geology, or physics. Interdisciplinary courses, except for specific courses listed below, do not satisfy division requirements. No division requirements may be met by field experience or courses taken satisfactory/unsatisfactory. Division of Humanities (Chair, PROFESSOR JORGE OLIVARES): American Studies 271, 276, 374 Art Classics (except Ancient History) English (except 111, 112, and 115) Greek Latin Foreign Languages (courses in Chinese, French, German, Italian, Japanese, Russian, and Spanish numbered 128 or higher) Music Performing Arts Philosophy 372 Religious Studies (all courses except 118) Division of Social Sciences (Chair, PROFESSOR JAMES W. MEEHAN): Administrative Science Ancient History Anthropology East Asian Cultures and Languages 151, 152 Economics Education Government History Philosophy (all courses except 372) Psychology **Religious Studies 118** Science-Technology Studies 213, 271, 332, 393 Sociology Division of Natural Sciences (Chair, PROFESSOR F. RUSSELL COLE): Astronomy Biology Chemistry Computer Science (non-laboratory) Geology Mathematics (non-laboratory) Physics Quantitative Analysis (non-laboratory) Science-Technology Studies 152 (non-laboratory), 215 (non-laboratory)

Major Requirement Each student must satisfy requirements of a major. Near the end of the first year, students are asked to make a declaration of intent regarding a major, either by electing a specific major or by filing an "Undeclared" statement. A major may be chosen in a single

subject, in one of a number of designated combinations, or in an individually designed independent major. Students are encouraged to reexamine their choices of major during the sophomore year and are required to elect a major prior to electing courses for their junior year. The respective academic departments and programs specify the courses constituting a major; requirements are detailed in the section "Courses of Study."

With the consent of the departments or programs concerned, a student may change majors. Forms for officially effecting such change can be obtained from the Registrar's Office. A student may change majors at the end of the junior year if the equivalent of at least 12 credit hours, with a 2.0 average, has been earned in the new major. If, in the senior year, the average in courses completed toward the major falls below 2.0, the major requirement is not fulfilled, and the degree cannot be awarded.

Any student whose major average falls below 2.0 has lost the right to continue with that major. A student who has lost the major may, with the written consent of the department or program concerned, be accepted or retained for one semester as a probationary major. Juniors and seniors may not continue at the College without good standing in a major. Each department or program designates the courses to be calculated toward retaining the major.

Majors Offered Students may elect majors in the following disciplines:

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Administrative Science	German	
American Studies	Government	
Anthropology	History	
Art	International Studies	
Biology	Mathematics	
Chemistry	Music	
Classics	Performing Arts	
Classics-English	Philosophy	
Classics-Philosophy	Philosophy-Mathematics	
East Asian Cultures and Languages	Philosophy-Religious Studies	
Economics	Physics	
Economics-Mathematics	Psychology	
English	Religious Studies	
French	Russian and Soviet Studies	
Geology	Sociology	
Geology-Biology	Spanish	
Geology-Chemistry	-	
<b>Options</b> Specific options are available within above majors as follows:		
Art: Studio Art	Chemistry: Environmental Scient	

Art: Studio Art	Chemistry: Environmental Science
Biology: Environmental Science	Geology: Environmental Science
Chemistry: Biochemistry	Mathematics: Computer Science
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**Minors** In addition to a major, students may also elect a minor. A minor normally consists of 5-7 courses and involves a coherent progression of courses including both introductory exposure to a field of knowledge and advanced work. A minor must include at least four courses taken in addition to courses taken to satisfy requirements for any major or other minor. Students must maintain a 2.0 average in the minor. Currently offered by the College are the following minors:

Administrative Science African-American Studies Anthropology Applied Mathematics/Quantitative Analysis Chemistry Classical Civilization Computer Science Creative Writing Economics Education Environmental Studies Geology German JapanesePublic PolicyMathematicsRussian Language and LiteraturePerforming ArtsScience-Technology StudiesPhysicsSociologyPsychologyWomen's Studies

**Major/Minor Limits** A student may declare up to two majors and one minor or one major and twominors. All declarations must be properly approved and filed with the Registrar's Office. Requirements for majors, minors, and options are outlined in the section "Courses of Study."

Independent Majors A student may design an independent major by a detailed written proposal, prepared with the support of an adviser who agrees to assume responsibility for the program throughout its course. Normally there will be at least one other adviser who will help to shape and direct the program. The program must include integrated course work representing from one quarter to one third of the total credit hours required for graduation and an independent study in the senior year. Implementation requires the written approval of the independent major board, a subcommittee of the Independent Study Committee. An annual report is required from each independent major and adviser, which will include any minor changes in the program; substantial changes, or a change of adviser, must be referred to the board. Inquiries about independent majors should be directed to the chair, Professor Peter Harris.

**January Program Requirement** The January Program, introduced in 1961-62, grew from a desire to extend to students a greater measure of academic responsibility. January is a period during which topics may be pursued single-mindedly, free from the competing demands of an orthodox curriculum. Selected courses, designated with "j," are offered during January; a student may elect one course in lieu of independent study. January courses are offered for two or three credit hours.

Because the January Program assures most students considerable flexibility in use of their time, it permits them to participate more fully in extracurricular activities in athletics, drama, music, and other fields. While students are encouraged to attend the lectures, seminars, concerts, and art exhibitions scheduled by the College, they are expected to spend 30 to 40 hours a week on their January Program topics.

To be eligible for graduation, each student must complete three January Programs if in residence for seven or more semesters, or two if in residence for six or fewer semesters. First-year students are required to take January courses offered by the College and are given preference in 100-level programs. Upperclass students have the option of courses, independent study, or field experience.

January Program options are:

(1) Courses Offered for Credit. Some are created specifically for January; others, originally designed to be offered during semesters, may be modified for January. Such courses are graded in the same manner as semester courses, except that nongraded January courses will be marked *credit* or *fail*.

(2) Independent Study. This involves an academic project under the direct supervision of a Colby faculty member. Projects ordinarily involve the preparation of an extensive paper or other suitable indication of the student's independent research or artistic efforts. Two options exist for electing January independent study: (a) for course credit that can be applied toward graduation requirements, to be graded as in (1) above; and (b) for January Program credit only, to be graded *honors*, *pass*, or *fail*.

(3) Field Experience and/or Internships. These projects, open to upperclass students, are usually carried out away from the campus. Though students doing such projects do not work under the direct supervision of a faculty member, their programs require a faculty sponsor. Credits earned through field experience or internship are nongraded and may be applied toward the graduation

requirements. Field experience and internships may be elected for January Program credit only, to be graded *honors*, *pass*, or *fail*.

(4) Noncredit Courses. These courses fulfill the January Program requirement, but students do not earn course credit that can be applied toward the credit hours required for graduation. These courses may be offered by experts in fields not included in the regular curriculum, and will be graded *honors*, *pass*, or *fail*.

Other than the grades indicated above, marks of *Abs* (absent from final examination) or *Inc* (work otherwise incomplete) may be given only in cases where the student has made an acceptable arrangement with the instructor. Grades of *Abs* and *Inc* must be made up within limits set by the instructor and not later than the second day following spring recess.

A full description of January courses is issued in October and students elect for January at that time. Changes in pre-registration may be filed subsequently; however, students failing to register by the third day of the January Program will be considered to have failed the program for that year, with the failure to be noted on official transcripts. A student choosing not to do a January Program in any year must signify this decision on the registration form. Except under unusual circumstances, no more than one January Program may be taken each year. January Program options in field experience and internships must also be approved in advance by the field experience coordinator. Appropriate deadlines for the satisfactory/unsatisfactory option in January are established each year.

**Exemption by Examination** When appropriate, distribution requirements, as well as certain requirements for the major, may be absolved by examination without course enrollment, at the discretion of the department concerned. Regularly enrolled under class students may earn credit by examination in 100- or 200-level courses to a maximum of 12 hours. Departmental examinations or external examinations approved by the department may be used, with credit given for the equivalent of at least C- level work. The cost of each examination is borne by the student. The College will exempt students from the language requirement in two ways only: for attaining before entrance a score of 60 in a College Board foreign language achievement test or for attaining a score of 60 in Colby's placement test during first-year orientation; in either case, no academic credit will be granted.

**Transferred Credits** Courses taken at other institutions, in which grades of C or higher have been earned, may be credited toward the Colby degree under the conditions and circumstances listed below. In addition to the conditions listed below, restrictions detailed in the section "Graduation Requirements" (q.v.) should be read with care.

(1) When students are admitted by transfer, their records are tentatively evaluated by the registrar to determine the transferable equivalent in Colby courses. These courses are credited subject to confirmation through satisfactory progress at Colby.

(2) College-level courses taken on college campuses by students prior to matriculation as firstyear students are evaluated on the same basis as courses presented by new transfer students.

(3) Credits to be transferred toward a Colby degree by matriculated students, including students dismissed for academic reasons by the committee on standing, must be approved in advance by the appropriate College authority. Courses to be transferred may not be taken on a satisfactory/ unsatisfactory basis. Forms on which to seek approval can be obtained from the following:

(a) For foreign study: Office of Off-Campus Study.

(b) For domestic exchange: Office of Off-Campus Study.

(c) For all other courses: Office of the Registrar.

(4) No student may receive transfer credit for more than 14 credit hours taken in summer school for the purpose of making up deficiencies incurred at Colby.

Requirement for Returning Students A student returning to college after an absence must

#### 34 ACADEMIC REQUIREMENTS

meet any new requirements for graduation if fewer than 61 Colby credit hours had been earned prior to the absence. If more than 60 credits had been earned, the student may elect to meet either the new requirements or those in effect at the time of initial enrollment.

**Repeated Courses** Students with a need to earn a higher grade may repeat a course previously passed; both the first and subsequent enrollments and grades will be a permanent entry on the academic record and transcript, and both grades will be used in computing the grade point average. No additional credit will be granted for the repeated course. *Exceptions*: Some courses build skills or change content in ways which make them repeatable regardless of grades given. Catalogue descriptions for such courses include the statement "May be repeated for additional credit." More specific information about repeatable courses may be obtained from the chair of the specific department.

**Student's Responsibility** Each student must be aware constantly of progress in meeting requirements for graduation. If there is any question about an individual record, the Registrar's Office should be consulted. Each student must also be aware of deadlines set within each academic year that pertain to academic actions; these are distributed at each registration as "Critical Dates."

Academic Honesty Plagiarism, cheating, and other forms of academic dishonesty are serious offenses. For the first offense, the instructor may dismiss the offender from the course with a mark of F and will report the case to the department chair and the dean of students, who may impose other or additional penalties including suspension or expulsion. This report becomes part of the student's confidential file and is destroyed upon graduation. A second offense automatically leads to suspension or expulsion. Students may not withdraw passing from a course in which they have been found guilty of academic dishonesty. A student is entitled to appeal charges of academic dishonesty to the Appeals Board. The decision of the board shall be final and binding unless overruled by the president of the College who has final authority and responsibility.

Without the explicit, written approval of the instructors involved, registration for two or more courses scheduled to meet concurrently is a form of academic dishonesty.

Attendance Although students are expected to attend classes regularly, each student is permitted two absences from each course in any given semester. Work missed by such absence is the student's responsibility. If the instructor deems it necessary, persistent student absence from class will be reported to the dean of students, and dismissal from the course without credit may result.

### Academic Honors

The degree of bachelor of arts with honors is awarded in three grades: summa cum laude to those who obtain a 3.75 grade point average; magna cum laude to those with a 3.50 grade point average; cum laude to those with a 3.25 grade point average.

A second category of honors, entitled *distinction in the major*, may be awarded to a student on the specific recommendation of the department. To be eligible, the student must have at least an average of 3.25 in the major. The department recommends *distinction in the major* only for those very few students who, in the opinion of the department, merit special recognition.

Honors programs are offered in American studies, chemistry, economics, English, French, government, history, philosophy, physics, psychology, and religious studies. Students accepted into these programs and successfully completing the work of the honors program and of the major earn the status of graduating with "Honors in [major]."

In American colleges, it is generally considered that the highest honor an undergraduate can receive is election to Phi Beta Kappa. This society, founded in 1776, restricts its chapters to leading colleges and universities, and maintains high scholastic standards. The Beta Chapter of Maine was organized at Colby in 1895.

Each spring, the College recognizes student achievement with the announcement of various honors and awards. Among those recognized are: members of Phi Beta Kappa; Senior Scholars for the ensuing year; and recipients of Phi Beta Kappa certificates, awarded to members of the three lower classes for distinction in scholarship.

Academic excellence is also recognized at a convocation each fall for the Julius Seelye Bixler and Charles A. Dana scholars. Bixler Scholars are the top-ranking students as determined by the cumulative academic record at the end of the preceding year. Dana Scholars are selected on the basis of a strong academic performance and potential leadership.

The Dean's List, recognizing high academic standing, and announced at the conclusion of each semester, includes the name of every student recommended by the dean of students whose average of all marks in the previous semester has been at least 3.2 for upperclassmen (3.0 for first-year students) in a minimum of 12 credits, exclusive of satisfactory/unsatisfactory credits. A student with any mark of incomplete (except in the case of illness or critical emergency) is not eligible for Dean's List.

# Academic Programs

**Senior Scholars** This honors program permits a limited number of seniors to devote six credit hours per semester to a project approved by the Senior Scholars Committee and pursued under the guidance of a faculty member. A final report is judged by three faculty readers and, upon successful completion, the senior scholar's report is deposited in the College library. Senior scholars are cited in the commencement exercises. Application must be made during the student's junior year. Inquiries should be directed to the chair, Professor Peter Harris.

**Interdisciplinary Studies** Interdisciplinary studies are governed by the Interdisciplinary Studies Council, composed of the directors of the various programs (chair, Associate Professor David Lubin). Majors, minors, and course clusters are offered.

An interdisciplinary studies program that offers a major has put together a highly structured, integrated curriculum involving courses from two or more departments together with those that might be offered by the program itself. Majors are offered in American Studies, East Asian Cultures and Languages, International Studies, Performing Arts, and Russian and Soviet Studies.

Minors involve a coherent program of interdisciplinary studies, including a final integrating experience. Minors are currently offered in African-American Studies, Applied Mathematics/ Quantitative Analysis, Classical Civilization, Education, Environmental Studies, Japanese, Performing Arts, Public Policy, Russian Language and Literature, Science-Technology Studies, and Women's Studies.

Course clusters are four or more courses, in two or more departments, that share a perspective or subject matter but for which no formal synthesizing experience is provided. A course cluster is offered in Legal Studies.

**Foreign-Language Semesters Abroad** Colby offers an opportunity for students to satisfy the College's language requirement (and earn a semester's credit) by living abroad and studying the language intensively. Fall semester programs are open to entering first-year students. Three programs are offered:

Colby in Cuernavaca: This program provides the opportunity for students to learn Spanish at the Center for Bilingual Multicultural Studies in Cuernavaca, Mexico. Students reside with families, attend intensive language courses, and have a full schedule of excursions to enrich their knowledge of Mexican life and culture. The program is under the supervision of a resident Colby professor and is offered in the fall semester. Students must have completed Spanish 125 or two years of high school Spanish.

Colby in Dijon: This program offers students the opportunity to study French language and culture in Dijon, France, in the International Center for French Studies, a branch of the Université de Bourgogne. Cultural activities and excursions are included. Students live with French families. The program, supervised by a resident Colby professor, is open to students who have completed the equivalent of one full year of French at Colby or who have a minimum of three years of high school French with emphasis on oral skills. The program is offered in the fall semester.

Colby in Lübeck: This program provides for a semester of intense study of the German language at the Trave Gymnasium in Lübeck, Germany. Students live with German families and also have the opportunity to study German culture and traditions. Students who have completed one semester of German or who have a minimum of three years of high school German may apply. Associate Professor James McIntyre is director in residence. The program is offered in the spring semester.

Additional information on these foreign-language semesters may be obtained from the

Admissions Office (for entering first-year students) or the Office of Off-Campus Study. Grades for these programs appear on students' transcripts as Colby credits.

**Colby Junior Year Abroad Programs** While courses needed for most liberal arts majors are offered at the College, many students are attracted by the opportunity to study abroad for a comparative examination of their major field or a different perspective on their studies. Such programs are generally undertaken during part or all of the junior year. Colby offers junior-year abroad programs in France, Spain, and Ireland.

Colby in Caen: This program, with the participation of Washington University in St. Louis, offers students the challenge of academic work within the French university system and the experience of total immersion in French life and culture. It is held at the Université de Caen in France after a six-week orientation in Paris. Courses are selected from a core program supplemented by special class sessions and courses offered in any division of the university. The program is designed to provide an intensive language and cultural experience. All meetings and courses are conducted in French. Participants live with families or in Université de Caen dormitories and are expected to speak only French while in France. Associate Professor Suellen Diaconoff of the Department of Romance Languages is resident director of this program.

Colby in Salamanca: This program, with the participation of Washington University in St. Louis, offers an integrated academic and cultural experience for students with a good command of the Spanish language. After a four-week orientation period, students may enroll in any university course but are encouraged to follow a core curriculum of courses in art, history, and literature. Participants may live with families or in apartments in Salamanca. Professor Francisco Cauz of the Department of Romance Languages is resident director.

Colby in Cork: This is a program for students from all liberal arts disciplines, offering an integrated academic and cultural experience in Ireland. Students may attend for the entire year or either semester. Students may enroll in any university course but are encouraged to concentrate on classes in the two upper levels. Participants live off campus but are expected to participate in university extracurricular activities as well as special day and weekend tours. Professor Arthur Champlin of the Department of Biology is resident director.

In all three of these junior-year-abroad programs grades are assigned by the resident director in consultation with the faculty of each university and in accordance with the Colby grading system. For Colby in Caen and Colby in Salamanca, grades earned in "core" courses only count toward students' grade point averages. For Colby in Cork, grades for all courses count toward students' grade point averages. Beginning in 1990-91, students in these programs may utilize the satisfactory/unsatisfactory option; a specific date for satisfactory/unsatisfactory election will be established by the resident director. Further information may be obtained from the Office of Off-Campus Study.

Other Colby Abroad Programs Responding to the increasing student interest in diversity of educational programs, the College offers, often as a member of a special consortium, several programs abroad.

Colby in London: This program, offered each semester, provides students an opportunity to study professional theater with a performing arts core of required courses, a range of electives, and a variety of theatrical productions to participate in or to attend. The program is designed to accommodate both beginning and more advanced students and is also open to entering firstyear students. Grades for courses in this program count in computation of students' grade point averages. A Colby professor serves as resident director. Information is available from the Performing Arts Program, the Office of Admissions (for entering first-year students), and the Office of Off-Campus Study.

Environmental Studies in Costa Rica: Colby is a member of a consortium sponsoring the

#### 38 ACADEMIC PROGRAMS

Center for Sustainable Development Studies. Sustainable development is studied in conjunction with conservation biology of tropical ecosystems, political and social systems of Costa Rica, and directed research. Work is done in a variety of locations including cloud forest, rain forest, agricultural areas, small villages, and urban areas. Home base for the course is at the Organization for Tropical Studies (OTS) location on 25 acres of cultivated grounds and tropical gardens, and adjacent to a 342-acre forest reserve. Information may be obtained through the Department of Biology.

Associated Kyoto Program: This is a Junior Year Abroad program associated with Doshisha University in the ancient capital of Kyoto, Japan. Colby is one of twelve liberal arts colleges that jointly oversee the program. In Japan, the program is directed by a senior Japanologist drawn from one of the member institutions. Study of the Japanese language is required. In addition to a seminar taught by the director, students may study Japanese culture, history, literature, economics, politics, and religion. Students live with a Japanese "home-stay" family for the first semester and are encouraged to participate in university cultural and/or athletic activities. All credits are transferable to Colby. Information is available from the chair of the East Asian Cultures and Languages Department.

Chinese Language Studies Away: Students with a minimum of one year of college-level Chinese may participate in the year-long Colby exchange with Peoples' University in Peking. In addition to this program, East Asian majors and non-majors alike avail themselves of extremely worthwhile opportunities on Taiwan, at other schools in China and Southeast Asia, and at intensive summer programs stateside. More information about all of these programs is available from the chair of the East Asian Cultures and Languages Department.

Study in the USSR: Students who wish to study in the USSR may choose to apply to several highly competitive Russian language programs at either the intermediate level (requiring a minimum of two years of college-level Russian for application) or the advanced level (requiring a minimum of three years of college-level Russian for application). Intermediate and advanced students may apply for summer, fall, or spring semester programs. In addition, as a member of the American Collegiate Consortium for East-West Educational Exchange, Colby has the opportunity each year to place several advanced Russian language students in Soviet universities or institutes for a year of study in a wide range of disciplines. Information is available from the director of the Russian and Soviet Studies Program.

Other Junior-Year-Abroad Programs For programs other than Colby-sponsored, the College requires that students attend a recognized foreign university and be fully integrated into that university's program of study. Proposals to study abroad must be approved by the students' major departments and by the Foreign Study Council. This approval must be obtained before the period of study abroad if credit is to be transferred. Students should be aware of application deadlines. The Office of Off-Campus Study will provide students with lists of approved programs and refer them to faculty members who are area advisers. Students on financial aid continue to receive that aid if the Committee on Foreign Study approves their programs; for other financial possibilities, students should consult the director of financial aid. Particular areas of study include:

Study in the British Isles: The College has more or less formal arrangements with most British universities, among them the universities of Edinburgh, Glasgow, and St. Andrews in Scotland, and in England the universities of Bristol, Essex, Kent, Reading, Sussex, Warwick, and York, as well as the University College, King's College, Queen Mary College, and the London School of Economics, all part of the University of London.

Study on the Continent of Europe: In those countries where Colby does not have a program of study, students normally attend through programs conducted by other American universities. Wesleyan and Syracuse University are among those that have programs in Austria, Germany, and Italy. Programs are also available at Leningrad State University, the Pushkin Institute in

Moscow, and several other institutes in the USSR. Information is available from the Office of Off-Campus Study.

Study in Canada: Some students attend the University of Toronto, McGill University, and other Canadian universities through an exchange program administered by the University of Maine. Details are available from the Office of Off-Campus Study.

Study in Africa: Colby has an exchange program with the University of Malawi, and other programs are being organized. Study in English-speaking African countries is open to all juniors, regardless of major. Details are available from the Office of Off-Campus Study.

Study in Latin America: Colby encourages students to explore the possibilities of study in Latin America through the School for International Training and other organizations. More information is available from the Office of Off-Campus Study.

**Domestic Exchange** Colby participates in student exchange programs with Howard University in Washington, D.C., and Pitzer, Pomona, Scripps, and Claremont McKenna colleges in California. Ordinarily, exchanges are arranged for a single semester of the junior year. Each student pays tuition, board, and room charges at the home institution; travel is at the student's expense. Students may obtain information about exchange programs from the Office of Off-Campus Study.

A course exchange program is in effect with Bates, Bowdoin, and Thomas colleges. Students may obtain information from the registrar.

**Other Domestic Programs** Several programs available to Colby students are sponsored by the College or by other United States institutions. The appropriate approval forms must be filed prior to enrollment in off-campus programs.

Colby in Washington: This semester program is designed to provide an academically rigorous and pedagogically diversified intellectual and cultural experience for Colby students. It is directed in cooperation with The Washington Center, with direct oversight by a Colby faculty member. Students with a variety of majors take advantage of the program, which is open to a maximum of 15 students from the junior and sophomore classes. Information is available from the Government Department and the Office of Off-Campus Study.

Williams College-Mystic Seaport Program in American Maritime Studies: Colby is one of several institutions participating in this one-semester program offering courses in American maritime history and literature, marine policy, oceanography, and marine ecology. Twelve days are spent at sea on a sailing vessel. In addition to formal course work, students develop maritime skills (e.g., celestial navigation, boat building, small-boat handling) under professional instruction. The program is accredited through Williams College. Information is available from the Office of Off-Campus Study.

Sea Semester: A limited number of students earn transferable credit through participation in this program of academic instruction and practical experience focusing on the oceanic environment. The program consists of both shore and sea components and is sponsored by the Sea Education Association in cooperation with Boston University. Information is available through the Office of Off-Campus Study.

Washington Semester Programs: An opportunity is available for a limited number of Colby sophomores and juniors to participate in the various Washington Semester Programs organized by the American University in Washington, D.C. Students can obtain first-hand knowledge of the national government as it deals with the crucial problems of foreign policy, economic policy, criminal justice, and urban affairs. Information is available through the Office of Off-Campus Study.

Engineering Programs: Colby College has coordinated programs with Dartmouth College, the University of Rochester, and Case-Western Reserve University as an alternative to graduate work in engineering. Both a bachelor of arts and a bachelor of science in engineering can be earned upon successful completion of three years at Colby and two years in engineering at one of the above institutions. Students graduating in this program are exempt from Colby's senior year in residence requirement, but all other graduation requirements must be met. Information is available through the Department of Physics.

*Field Experience/Internships*: Qualified students may earn academic credit by undertaking offcampus field experiences or internships as participants in approved programs or by obtaining faculty sponsorship of an individual project or course of study. Refer to the section "Field Experience" under "Courses of Study." Information on a wide variety of field experience opportunities and application forms for field experience and internships are available in the Office of Off-Campus Study. Students planning to participate in field experience must be aware of deadlines for filing applications.

*ROTC*: Colby students may participate in Army or Air Force Reserve Officer Training programs offered at other Maine sites. Information about these programs is available in the Dean of Students Office.

**Professional Preparation** Many Colby graduates go on to study for advanced degrees in specialized areas of concentration; specific committees of the College are available for professional preparation advice in the following areas:

Law and Government Service: The prelaw adviser counsels students preparing for careers in these areas. Prelaw students may major in any field, but they will profit from early consultation with the prelaw adviser on courses that provide the strongest possible liberal arts background for the study of law.

Medicine and Dentistry: Medical schools do not require a particular major but do require high academic standing and the inclusion of biology, chemistry, physics, mathematics, and English in the student's college program. The Health Professions Preparation Committee provides formal advising and other support to assist students throughout their years at Colby.

*Theology*: Members of the Department of Religious Studies, in cooperation with the College chaplains, serve as advisers to students who plan to enter seminaries.

**Computer Resources** Computers are recognized at Colby as valuable tools for scholars in all disciplines. They are used by faculty members and students in a wide range of applications, and the College is committed to making appropriate computing resources available. In the majority of courses, faculty use computers in some way and most students will encounter course assignments that require the use of computers, in addition to student writing assignments most often done on computers.

Apple Macintosh computers, adopted by the College as the microcomputer standard in 1985, are available in the MacLab (Lovejoy 400), along with a substantial software library. Additional Macs are located in the Mac II Lab (Mudd 415) and the Library Cluster (Miller 16). Specialized computing facilities dedicated to particular departments or courses are located in Biology, Chemistry, Physics, and Psychology. Macs are also available for sale at a significant discount through the Bookstore to full-time students, faculty, and staff.

Central (time-sharing) computing systems include a VAX 8200 for academic use and a MicroVAX 3600 running the library automation system, including catalog information. An account is set up automatically for each student on the academic VAX—passwords may be obtained at Computer Services. Available software on this Ultrix system (DEC's version of UNIX) includes statistical and graphical analysis software (SPSS-X, BMDP, RS/1, S, and TSP), word processing utilities (nroff, troff, tbl, eqn, and TeX), and programming languages (Pascal, C, Fortran, APL, Logo, and others). These computers can be accessed from Macs and terminals in all clusters.

Colby's data communications network, built around a high speed Ethernet backbone through the academic buildings, is available in all student computer clusters and in most faculty

offices and classrooms. The College is a member of the New England Academic and Research Network (NEARnet), which provides access to regional, national, and international computing resources, including electronic mail, file transfer, and remote login. Several major U.S. library catalogues are available on the network, in addition to supercomputers, specialized data sources, and conferencing systems.

Assistance can be obtained from the student consultants in the MacLab and the staff of Computer Services. Workshops are scheduled throughout the year to introduce the computer systems and provide advanced information on specific topics. A newsletter is published monthly to inform users of workshop schedules, provide helpful tips, and discuss policy issues.

The Computer Committee, made up of faculty, staff, and students, acts in an advisory capacity to Computer Services. All meetings are open and those interested in computing issues are encouraged to attend and participate in discussions.

**Special Programs** Recognizing the fact that diverse interests exist in every community, and that even the most professionally trained individuals have a need to continue their education, Colby maintains an Office of Special Programs with a full-time director, Associate Professor Robert H. Kany.

Each summer, approximately 6,000 individuals from throughout the nation and other countries are on campus for courses, conferences, seminars, and institutes in areas of medicine, public and professional services, youth programs, and sports camps.

The major focus of the summer program is continuing medical education (CME); indeed, Colby is the only undergraduate college in the country approved by the Accreditation Council for Continuing Medical Education to sponsor CME for physicians. There are about 15 CME offerings each year in a variety of specialty and family-practice programs attended by health-care professionals.

A coordinating council of Colby administrators and physicians from Waterville's Mid-Maine Medical Center advises and helps to manage this educational component.

Approximately 100 doctors enroll each summer in the nine-week Lancaster Course in Ophthalmology, and three- to four-day seminars are held in Addiction Medicine, Anesthesiology, Child Abuse, Diabetes, Emergency Medicine, Family Practice, Forensic Medicine, Obstetrics-Gynecology, Ophthalmology, Pediatrics, Surgery, and Urology. The Maine Orthopaedic Review is a two-week course. In addition to CME accreditation, for courses designed for primary-care physicians, American Academy of Family Practice credit is generally available.

Public and professional service programs include the Estate Planning and Tax Institute, Advanced Audiology, Church Music Institute, Great Books, and Piano Institute. The Portland String Quartet is in residence for two weeks. Youth camps for cheerleading, field hockey, soccer, football, basketball, cross-country, etc., are available.

During the academic year, the office arranges such annual conferences as the Colby Institute for Management. Noncredit courses for which the continuing education unit may be earned are also structured and evaluated through Special Programs. In addition, the use of Colby's facilities for conferences is coordinated through the Office of Special Programs throughout the year.

Information may be obtained by writing to the director.

# Academic Procedures

**Student's Program** The student at Colby normally takes from 12 to 18 credit hours in each semester, and one offering during the January term.

Each first-year student has a faculty adviser to assist in planning the academic program. A new faculty adviser is assigned when the student has selected a major. Approval of the faculty adviser(s) is required for all procedures affecting a student's academic program.

Prospective students frequently ask what subjects they will study—especially in the first year. It would be misleading to present any specific pattern of courses for either of the first two years. The programs of individual students may vary widely because there is considerable latitude within the requirements. To prepare students for their lives in an increasingly complex society, students are encouraged to learn quantitative skills, to learn to write well, and to take courses that expose them to cultures other than their own.

To assure distribution among the divisions, first-year students must include English composition, a foreign language (unless exempted by examination), and courses to meet distribution requirements. Students are advised to complete all distribution requirements by the end of their sophomore year. Students are encouraged to elect subject areas that are new to them and are advised to avoid overconcentration in any department or division.

Students considering a scientific career or the study of medicine should begin electing scientific subjects at once. Many major departments in both the natural and social sciences recommend mathematics in the first year. The student and assigned adviser should discuss a prospective program, noting carefully the recommendations and requirements in areas of major study. The initial selection of a major is by no means final; students are encouraged to explore alternatives throughout their sophomore year.

Academic Standing A student's class standing is determined by the number of credit hours passed and residence semesters completed.

Freshman standing: fewer than 24 credit hours or less than two semesters.

Sophomore standing: 24 to 53 credit hours and two or three semesters.

Junior standing: 54 to 83 credit hours and four or five semesters.

Senior standing: 84 or more credit hours and six or seven semesters.

Class standing is not automatically changed to a higher level upon the posting of additional credits; students who believe themselves eligible for a change of class year should consult the registrar.

**Registration** Registration each semester takes place on a date specified in the College calendar.

In exceptional circumstances specified in advance in writing by the dean of students, a student will be permitted to register later than the seventh class day of each semester.

It is important that students understand the distinction between payment of fees and registration. Prior to registration, each student must complete payment of fees as specified by the treasurer, who is not authorized to defer such payment.

New students must also provide the required health certificate prior to registration (see section in "Admission" in this catalogue).

**Election of Courses** Each semester, with the approval of their advisers, students elect programs of study for the following semester; these elections, with approved revisions, are confirmed during the registration period at the beginning of each semester. A student's academic program must have the adviser's approval and be properly filed with the registrar before credit will be granted for any course taken. Until the eighth class day of the semester, and

with the adviser's approval, voluntary changes in a student's program may be made. Any such changes must be filed with the Registrar's Office on the appropriate (add/drop) form.

Changes of section within a course must be approved by the department or course chair, and are subject to the same deadlines as changes of course. Ordinarily, a course cannot be repeated for additional credit nor may a student register for two courses scheduled to meet concurrently.

No student may register for more than 18 credit hours in any semester unless one of the following stipulations is satisfied: (1) at least a 3.00 overall grade point average in two or more Colby semesters, (2) at least a 3.25 grade point average during the previous two semesters (cumulative), or (3) special permission from the faculty adviser(s) and the dean of students.

**Marks** A student may obtain marks from instructors, but the only official collegerecord is that maintained in the Registrar's Office. Grade reports are issued to the student at the end of each term; the College does not normally furnish parents with reports.

In regularly graded courses: Marks are ordinarily posted as A, B, C, D, and F, with + or - appended to grades A through D. A mark below D- means failure.

In nongraded courses: During the semester, Cr indicates credit is earned; NC is recorded if credit is not earned. During January, Cr indicates credit for program; F is recorded if no credit is earned.

Abs signifies absent from final exam.

Inc signifies incomplete: a course not finished for some reason besides failure to take the final exam. A mark of *Inc* is valid only if appropriate arrangements have been made by the student with the instructor by the last class day of the semester.

Grades of Abs or Inc must be made up within limits set by the instructor but not later than January 15 for the first semester or July 1 for the second semester. After these dates, any remaining mark of Abs or Inc will be changed to F unless the student has applied for, and circumstances warrant, an extension by the dean of students. For the completion of work without penalty, extensions are considered for exceptional circumstances only.

Marks of W and WF indicate withdrawal from a course and represent the student's standing at the time of withdrawal. WF indicates that the student was failing or was dropped from a course by the instructor for unsatisfactory attendance. W indicates either passing or no basis for judgment. These marks are excluded from computation of all averages. Withdrawal is permitted through the final class day of the term.

F indicates failure or abandoning a course without formal withdrawal.

Academic Review The Committee on Academic Standing reviews all current student records at the end of each semester to determine that all enrolled students are making satisfactory progress toward the degree. Students who earn fewer than 12 credits or less than a 2.0 grade point average in any semester, exclusive of the January Program, are subject to being placed on probation or dismissed from the College by the committee. Only when there are compelling extenuating circumstances (e.g., illness, unusual personal problems) is it advisable for a student to carry fewer than 12 credits; such a reduced program must be approved by the dean of students.

A student who is on probation must earn 12 credits and a C(2.0) average in the subsequent semester. The January term will be considered as part of the full year's performance in evaluations made by the committee at the end of the second semester.

Students who have been dismissed may, after one year, apply to the committee for reinstatement; during the required interview the student must be prepared to demonstrate an improved commitment to scholarship. A second dismissal is final.

Beginning with the academic year 1990-91, any student on academic probation will be required to consult with his/her adviser, and any extracurricular adviser, such as a coach, to

discuss whether the student should continue participation in extracurricular activities. A student on academic probation for a second or subsequent semester will be declared ineligible to participate in any College-sponsored extracurricular activities unless, in consultation with the academic and extracurricular advisers and with the approval of the associate dean of students, the student develops a plan for allocating time to course work and extracurricular activities.

Satisfactory/Unsatisfactory Students may elect a limited number of courses on a satisfactory unsatisfactory basis; these cannot include distribution requirements. Most departments specify that major courses must be taken on a conventionally graded basis.

Forms for declaring satisfactory/unsatisfactory options can be obtained at the Registrar' Office. The form must be completed and returned by the end of the change of course (add/drop period in the term in which the course is taken. A satisfactory/unsatisfactory election may be voluntarily revoked by a deadline established for each term. Letter grades submitted be instructors will be converted to S (for grades A through C-) or U before being posted on per manent records; any grade below C- is unsatisfactory and will be recorded as a U on the grad record. The Registrar's Office cannot release more specific information on the quality of the  $\frac{1}{2}$  even upon request of the student who earned it.

Auditing Courses Adults who are not matriculated Colby students may register to aud courses at the College. Application to audit must be made with the dean of admissions; approval is granted, forms for registering to audit specific courses must be filed with th Registrar's Office. Permission to audit will be withheld if the class is already too large and auditing applications for it are numerous.

Members of the College staff and their spouses, with prior approval of the offices Admissions and Personnel, may audit courses.

A matriculated Colby student may register to audit courses by obtaining written consent the instructor and adviser. No auditing fee is charged; no credit is earned, and the audit is no recorded on the student's permanent record.

An auditor is not permitted to submit papers or perform any other function for which courcedit is usually given. For this reason, auditing is seldom permitted in courses where the mether of instruction involves significant individual attention and criticism. Under no circumstance can academic credit be given an auditor, nor can an audited course later be converted into a accredited course merely by paying the regular course fee. The decision whether the courses to be audited or taken for credit must be made at entry.

Hour Exams and Quizzes Hour exams will be scheduled with at least one week's notice. Sh t quizzes may be given without notice.

Semester Exams Six days are set aside at the close of each semester for exams in all cour: s. The Registrar's Office schedules the time and place of semester exams in all courses except the that are specifically exempted by the appropriate department chairman.

An excused absence for a semester exam is granted if:

(1) The instructor gives permission because of illness or grave emergency.

(2) The registrar has been notified of a valid conflict *on the appropriate form*, e.g., three ex: as on one day, four in consecutive order, or two courses with the same exam number (the last r si be resolved at the time of registration).

A student with three exams scheduled in one day or four exams in sequence may choose at exam to be postponed.

A postponed exam may be taken on the designated make-up day or at another the

subsequent to the scheduled exam agreeable to both the student and the instructor. There is no nake-up for failed exams.

The mark for the exam may constitute up to half of the total course mark.

Warnings Throughout the semester, at the discretion of the professor, warnings are sent to tudents. A *major* warning means that a student's average is below passing; a *minor* warning neans that a student's average is barely passing. Warnings may also be sent for excessive absence or late or incomplete assignments. Attention is called to the statement on attendance in the 'General Regulations' section of this catalogue.

Withdrawal, Leave of Absence Students who leave Colby while a semester is in progress are equired to withdraw formally, as are students who leave at the end of a semester with no definite blans for return. Students who withdraw are not permitted to return without special approval. Students who withdraw for medical reasons must have the permission of the College physician n order to apply for readmission. Eligibility for initial or continued financial assistance from the College will be subject to review and action by the Financial Aid Committee.

Students who leave to participate in College-approved student programs elsewhere or who eave at the end of a semester for a specified period may take a leave of absence and are not equired to obtain special permission in order to return. Those who do poorly in study programs :lsewhere are, however, subject to review and action by the Committee on Academic Standing.

Such withdrawals or leaves must be officially accomplished by filing the appropriate form, which must be obtained from and signed by the dean of students. The proper exit procedure, which includes the surrendering of residence hall and post office keys, must be followed to be sligible for any refunds that may be due (see "Refunds"). A student who leaves without official notification is not eligible for refunds, which are calculated from the date on the approved notice.

**Franscripts** Students and alumni may have official transcripts mailed to other institutions, prospective employers, or other designated recipients only by requesting them in writing; a ranscript request form is available at the Registrar's Office. The fee for this service is \$1 per ranscript after the first. Only courses taken at Colby are listed. Transcripts will not be issued or anyone whose financial obligations to the College have not been met.

# Courses of Study

#### Key to Symbols and Methods of Course Designation

Each course is known by a title, subject, and number: e.g., English Composition is English 115.

The first digit indicates the class or classes eligible to take the course:

000: noncredit January programs; first-year students have priority unless otherwise noted.

100: open to first-year students.

200: ordinarily open to sophomores and classes above.

300: ordinarily open only to juniors and seniors.

400: ordinarily restricted to seniors.

An odd number as the *third digit*: course is usually given in the first semester. An even number as the *third digit*: course is usually given in the second semester.

d with a course number: course is given each semester.

d with a 1 or 2: course is given out of semester sequence.

j: January program course.

[]: course not offered in 1991-92.

t: course will probably be offered in 1992-93.

\*: course will probably not be offered in 1992-93.

Time and place of classes: a schedule of hours and rooms for courses listed in this catalogue is available at the Registrar's Office at registration periods.

Courses listed are subject to withdrawal at the discretion of the College administration. Academic departments reserve the right to limit enrollment in any course and to establish priorities for courses that might be over-enrolled.

Credit hours are per semester unless otherwise noted. Courses listing variable credit are offered primarily for the smaller number of credits. Students can earn augmented credit in these courses by completing such extra work as the instructor may specify. Subject to stricter deadlines as may be specified by the instructor, credit can be increased in a variable-credit course until midsemester or decreased until the last day of the semester. A Calendar of Critical Dates for each academic year is issued by the Registrar's Office and includes deadlines for adding, dropping, and withdrawing from courses; declaration and revocation of the satisfactory/unsatisfactory option; adding and dropping optional credits; and other appropriate dates.

# Administrative Science

#### Chair, ASSOCIATE PROFESSOR LEONARD REICH

Professors Yvonne Knight and Randy Nelson<sup>1</sup>; Associate Professor Reich; Assistant Professor Batya Friedman<sup>2</sup>; Visiting Assistant Professors William Lee<sup>3</sup> and Elizabeth Fisher<sup>4</sup>

The programs in administrative science are devoted to the study of organizations in American society. In today's climate of intense competition and social activism, it is important to approach organizational problems wisely, with ethical responsibility, historical perspective, and imagination. Students wishing to explore the history, philosophy, and practice of management

in a variety of organizational settings may choose the administrative science major or minor. Requirements for the Major in Administrative Science

Administrative Science 212, 221, 272, 279, 311, 493; either Administrative Science 336 or Philosophy 211; Economics 133, 134; Mathematics 231, or 381 and 382; History 124 or Economics 274. Also three courses chosen from Government 392, Economics 331, Sociology 332, or other courses in Administrative Science.

No administrative science course may be taken satisfactory/unsatisfactory. No other course used to satisfy major requirements may be taken satisfactory/unsatisfactory. The point scale for retention of the major applies to all courses used to satisfy major requirements.

**Requirements for the Minor in Administrative Science** Administrative Science 221, 279, 311; either Administrative Science 336 or Philosophy 211; Economics 133, 134; Mathematics 231, or 381 and 382.

Successful completion of the minor requires a 2.0 average for all requirements above. None of the required courses may be taken satisfactory/unsatisfactory.

<sup>1</sup>Joint appointment in administrative science and economics.

<sup>2</sup>Joint appointment in administrative science and mathematics.

<sup>3</sup>Part-time second semester only.

<sup>4</sup>Part-time.

**212 Issues in Management** A broad perspective on the field of Administrative Science is provided through consideration of the ethical, financial, interpersonal, structural, economic, legal, and competitive issues that managers face. Based on readings, lectures, and case studies, the course curriculum will draw on the expertise of the entire department faculty. *Three credit hours*. MR. REICH

**221d Financial Accounting** The underlying theory and analytical aspects of the measurement, recording, and reporting of a firm's financial information to external users. Emphasis is on the conceptual and communication aspects of the financial accounting model in modern society—its relationship to law, economics, and social policy. *Four credit hours*. MRS. KNIGHT

**222** Management Accounting The principles of measuring, recording, and reporting the accounting information needed by management in planning, coordinating, and controlling an organization's activities. The construction and uses of full cost, differential, and responsibility accounting data will be discussed, with attention to behavioral implications and performance evaluation. *Prerequisite:* Administrative Science 221. *Four credit hours.* MRS. KNIGHT

231 Technology, Corporate Strategy, and Competition An examination of the interactions between scientific progress, technological opportunities, competitive pressures, corporate strategy, and public policy towards science and technology. Consideration is given to social and organizational influences on corporate research, development, and innovation. *Prerequisite:* Economics 133. *Three or four credit hours*. MR. REICH

[251] Technology and Society in America An examination of the processes by which rapid technological developments took place in America, including the country's transformation from an agricultural- to an industrial-based economy during the nineteenth century; the stimuli and constraints on inventors, engineers, entrepreneurs, and corporations; the hesitant and often ineffective attempts by government to control technology; and the impact that evolving technology and industry have had on the lives of the nation's people. *Prerequisite:* History 124. Three or four credit hours.

[252] Engineers and Engineering What engineers do; how they do it; its effects on industry and society. The course will survey important historic engineers and projects, engineers' roles in shaping the modern world, the development of engineering art and science. Students will learn techniques of engineering problem solving and design. Enrollment limited. *Prerequisite:* One semester of college math. *Four credit hours*.

**272** The Computer and Decision Making An introduction to the uses of computers, especially in administrative and work-place situations. It is not a programming course but rather one where students gain an understanding of the ways computers can be used to improve efficiency and aid decision making in business, industry, government, and other organizations. In addition to computer system design and general programming techniques, the course examines philosophical and social issues such as artificial intelligence and the impact of computers on the work place. *Prerequisite*: Permission of the instructor. *Three credit hours*. MS. FRIEDMAN

**279d** Organizational Theory and Behavior A historical and sociological orientation toward the study of people in business and other organizations. The course makes use of both theoretical concepts and empirical data. *Three credit hours*. MS. FISHER

**311d2 Finance** Theory and analysis of how firms judge investments and financial alternatives. The capital markets and the influence of risk are considered. *Three or four credit hours*. MR. NELSON

**333** Marketing in America Development of the broad concept of marketing as a pervasive organizational function. Emphasis is on the processes by which organizations make product, service, and social marketing decisions, and on the societal consequences of those decisions. *Three or four credit hours*. MRS. KNIGHT

[334] Administration of Public and Social Service Organizations An introduction to the theories and methodologies utilized in the administration of public and social service organizations: federal, state, and local government units, health care and educational institutions. Emphasis placed on the management tools and skills that best enable the organization to perform its function efficiently and effectively in an environment of constantly changing social and economic values. *Prerequisite:* Administrative Science 221. *Four credit hours*.

**336d1** Business, Ethics, and Technology Relationships between the private sector and the changing American political economy. Issues include: business/professional ethics; obligations of organizations to workers, stockholders, and communities; the impact of technology on corporate practices and government regulation; and the influence of business on personal values and public policies. *Prerequisite:* Economics 133, 134. *Three or four credit hours*. MR. REICH

**353** Managerial Economics An examination of how economic theories may be used to aid in decision making in both the private and public sectors. Topics include demand and elasticity, production and cost theory, pricing policies, and cost-benefit analysis. Students who have earned credit for Economics 223 may not take this course for credit. *Prerequisite*: Administrative Science 221 and Economics 133, 134. *Three or four credit hours*. MR. NELSON

**354** Law in American Society The course is designed to provide an understanding of the law and its application to individuals, groups, and organizations. The origin and purpose of law, legal research, contracts, criminal law, torts, and administrative law; emphasis on class participation through discussions, debate, and mock trials. *Four credit hours*. MR. LEE

[372] Operations Research A survey course in the application of scientific methods to the study of organizational operations via quantitative models. *Prerequisite*: A previous course in statistics and linear algebra or permission of the instructor. *Three or four credit hours*.

**391d** Analytical Research Paper An analytical research paper to be written in conjunction with and while currently enrolled in one of the electives chosen for the administrative science/ quantitative methods or administrative science major. Required of all administrative science/ quantitative methods majors. *Prerequisite:* Permission of the instructor. *One to three credit hours*. FACULTY

**491,492** Independent Study Individual projects devoted to organizational issues in which the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor. *One to four credit hours*. FACULTY

**493d** Senior Seminar Specific topics will change yearly and will be announced in advance. *Prerequisite*: Senior standing as an administrative science or administrative science/quantitative methods major. *Four credit hours*. FACULTY

## African-American Studies

Director, ASSOCIATE PROFESSOR CHERYL TOWNSEND GILKES

ADVISORY COMMITTEE: Professors Charles Bassett (American Studies and English), Roger Bowen (Government and East Asian Cultures and Languages), Patrick Brancaccio (English and Performing Arts), Cedric Bryant (English), William Cotter (Government), Henry Gemery (Economics), Gilkes (Sociology and African-American Studies), Beverly Hawk (Government), Paul Machlin (Music), Phyllis Mannocchi (English), David Nugent (Anthropology), John Sweney (English), James Webb (History), and Robert Weisbrot (History); also Victoria Hershey (Associate Dean for Intercultural Affairs), Frances Parker (Associate Director, Library), and two student representatives

The African-American Studies Program is an interdisciplinary program of courses organized to provide an overview and introduction to the experiences of African Americans in the United States and to connect those experiences to the literatures, histories, and cultures of Africa and of Latin America and the Caribbean. Core courses in the program expose students to classical and contemporary writings, to issues of public policy, to critical debates in history and social science, and to main currents of historical and contemporary cultural expression. Students may elect a minor built upon courses in anthropology, history, literature, economics, government, music, religion, and sociology. The program exposes students to the history and culture of Africans and people of African descent throughout the Americas. However, the primary focus of the program is on the experience of African Americans in the United States.

Requirements for the Minor in African-American Studies Seven courses with at least two courses at the 300 or 400 levels. Courses chosen should include American Studies 276 or its equivalent, at least one course focusing on Africa, two courses on the African-American experience, either a seminar or an independent study, and at least one course in history, one in social science (anthropology, economics, government, psychology, religion, or sociology) and one in literature.

Interested students are also encouraged to consider an independent major in African-American studies.

Courses Offered in African-American Studies

American Studies: 276 African-American Culture in the United States. Anthropology: 112 Cultural Anthropology; 217 Cross-Cultural Race Relations; 254 Women of Color in the United States; 314 Seminar in Underdevelopment, Change, and Cultural Survival.

Economics: 293 Economic Development in the Third World.

English: 343 African-American Literature; 398 African-American Women Writers at Work; 427 The Harlem Renaissance; 493 Senior Seminar, African-American Literature.

*Government:* 277 African Politics; 319 Law and Social Change: Women and Minorities; 418 Culture, Technology, and Development in Africa.

History: 123, 124 Survey of United States History; 153 Western Africa and the Atlantic World; 154 Eastern and Southern Africa and the Indian Ocean World; 233, 234 Comparative World History; 278 African-American History: From Slavery to Freedom; 319 Economic History of Twentieth-Century Africa; 415 The 1960s in the United States; 432 Seminar in African-American History.

Music: 133 American Music; 232 Jazz; 234 Rock's First Era: 1945-75.

Sociology: 214 African-American Elites and Middle Classes; 231 Contemporary Social Issues; 252 Race, Ethnicity, and Society; 355 African-American Women and Social Change; 356 African-American Religious Experience; 357 Race Relations and Social Change.

**491, 492** Independent Study Individual study of special problems in African-American studies in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor and of the program director. *One to four credit hours*. FACULTY

### American Studies

#### Director, PROFESSOR CHARLES BASSETT

ADVISORY COMMITTEE: Professors Bassett (American Studies and English), Pamela Blake (Government), Patrick Brancaccio (English and Performing Arts), Cedric Bryant (English), Debra Campbell (Religious Studies), Anthony Corrado (Government), Henry Gemery (Economics), Cheryl Gilkes (African-American Studies and Sociology), Natalie Harris (English), Peter Harris (English), Pamela Hronek (History), Yeager Hudson (Philosophy), Thomas Longstaff (Religious Studies), David Lubin (American Studies and Art), Paul Machlin (Music), Sandy Maisel (Government), Phyllis Mannocchi (English), Michael Marlais (Art), Richard Moss (History), Patricia Onion (English), Harold Raymond (History), Leonard Reich (Administrative Science), Phyllis Rogers (American Studies and Anthropology), John Sweney (English), Robert Weisbrot (History); also Linda Goldstein (Research Assistant in American Studies), and five students majoring in American Studies

A student majoring in American studies at Colby is taught—in single courses and through a combination of courses—the subject matter of America's past and present, with special effort devoted to the integration and knowledge of more than one academic discipline. Built around a core of courses in American history and American literature, the American Studies Program strives for genuinely interdisciplinary insights into the complexities of American thought and culture.

**Requirements for the Major in American Studies** 

American Studies 271\* and 493; English 355\* and 356\*; History 123\* and 124\*; two additional English courses in American literature; two additional courses in American history; and four additional courses other than American history or American literature (see lists below) with some interdisciplinary focus on American culture—coordinated with the approval of the major adviser according to chronology, theme, or method—to bring the total to a minimum of 14 courses. (*Note:* courses marked with \* are expected to be completed before the junior year.)

Beginning with the Class of 1994, the requirements for the major are as stated above with

these exceptions: American Studies 376 is also required; and *three* (instead of four) additional courses other than American history or American literature are required.

Students majoring in American studies may apply during their junior year for admission to the honors project. On successful completion of the work of the honors project and of the major, their graduation from the College will be noted as being "With Honors in American Studies."

The point scale for retention of the major applies to all courses offered toward the major. No requirement for the major may be taken satisfactory/unsatisfactory. No more than five courses taken abroad may be counted toward the major.

Courses Approved for the Major in American Studies

Administrative Science: 251 Technology and Society in America; 336 Business, Ethics, and Technology; 354 Law in American Society.

American Studies: -97, -98 Selected Topics (except at the 100 level); 271 Introduction to American Studies; 273 Introduction to American Material Culture; 276 Black Culture in America; 374 The Female Experience in America; 376 American Cultures in Historical Context; 483, 484 Senior Honors Project; 491, 492 Independent Study; 493 Seminar in American Studies.

Anthropology: 211 Indigenous Peoples and Cultures of North America; 254 Women of Color in the United States.

Art: 271 American Architecture; 277, 278 American Visual Arts; 353 Contemporary Art, 1914 to the Present; 377 Topics in American Art and Material Culture; 491, 492 Independent Study. *Economics*: 231 Environmental and Natural Resources Economics; 274 American Economic History; 312 Topics in Law and Economics; 491, 492 Independent Study.

Education: 336 History of Education: The American School.

English: 338, 339 American Renaissance I, II; 341 The Realistic Imagination; 343 African-American Literature; 345 Modern American Fiction; 347 Modern American Poetry; 349 Contemporary American Poetry; 351 Contemporary American Poetry; 353 The American Short Story; 413 American Authors; 425 Modern Women's Literature; 427 The Harlem Renaissance; 493 Seminar in American Literature; 497 The Continuity of Native American Literature.

Government: 252 United States Foreign Policy; 255 Introduction to American Political Thought; 256 State Government; 257 United States and the Third World; 271 War and Revolution in Vietnam; 273 [or 373] The American Congress; 275 The Committee System in the United States Congress; 276 The American Presidency; 312 Directions in Feminist Theory; 313, 314 American Constitutional Law I, II; 315 Federal Budget Policy; 316 Foundations of American Constitutionalism; 317 The Policymaking Process; 319 Law and Social Change: Women and Minorities; 337 Business and American Foreign Policy; 341 United States Foreign Policy Toward the Middle East; 344 American Liberalism in Thought and Practice; 352 The Judicial Process; 356 Parties and the Electoral Process; 392 Governing; 432 Seminar on Executive Leadership in the Federal Government; 433 American Government and the Press; 434 Women in American Politics; 451 The New Deal; 457 United States Foreign Policy Seminar; 491, 492 Independent Study.

History: 215 America and Asia; 217 The Kennedy Administration; 257 History of Women in America; 278 African-American History; 298 The American West in Fact and Fiction; 312 The Atlantic Revolutions; 344 Crisis and Reform: The 1960s; 353 American Culture and Society 1865–1975; 371 War and Revolution in Vietnam; 372 The American Civil War; 376 America: 1607–1783; 377 The Coming of the Civil War; 378 United States History 1783–1860; 393 American Cultural History 1600–1865; 415, 416 Seminars in American History; 432 Seminar in African-American History; 491, 492 Independent Study.

Music: 133 American Music; 232 Jazz.

Philosophy: 252 American Philosophy; 491, 492 Independent Study.

Psychology: 253 Social Psychology; 491, 492 Independent Study.

#### 52 AMERICAN STUDIES

*Religious Studies:* 217 Religion in America; 257 Women in American Religion; 398 Biblical Images in American Literature; 491, 492 Independent Study.

Science-Technology Studies: 213 Science and Technology in the Federal Government; 216 Aeronautics in America; 218 The American Home, 1792–1992; 271 History of Science in America.

Sociology: 231 Contemporary Social Problems; 233 Crime in American Society; 238 The School in American Society; 252 Race, Ethnicity, and Society; 276 Women and Men in Society; 292 Social Change; 318 Contemporary Theory; 334 Social Deviance; 355 African-American Women and Social Change; 356 African-American Religious Experience; 491, 492 Independent Study.

213j Medicine in Nineteenth- and Twentieth-Century America: Women as Pioneer Healers An investigation of medical education and practices in America prior to the introduction of the scientific model, including regular medicine; "irregular" approaches such as hydropathy, homeopathy, and botanics; and quackery. Primary sources and secondary readings used to explore women's participation as healers and professional doctors during this era. Contrast and comparison will be made with current trends and the status of women who now choose medical careers. Practicing physicians will be invited to speak with the class, and field trips to medical facilities will be considered. Enrollment limited. *Three credit hours*. MS. GOLDSTEIN

271d Introduction to American Studies An interdisciplinary examination of an era or theme in American thought and culture. Social, political, racial, artistic, musical, economic, and cultural aspects of American life will be explored in lecture and discussion. *Four credit hours*. MR. LUBIN AND MS. ROGERS

[273] Introduction to American Material Culture Seeks insight into the everyday lives of Americans at different times and places, with a focus on New England. Assumptions about the past will be formulated and tested by visual and historiographic scrutiny of household artifacts, vernacular architecture, common landscape, etc. A field trip and research project are required. *Three credit hours*.

276 African-American Culture in America An interdisciplinary examination of black cultural expression from the slave era to the present, including folk tales, blues, gospel music, work songs, jazz, sermons, dance, literature, and social institutions, tracing the stages of development of a distinctive black culture in America, its relationship to the historical, social, and political realities of African Americans, and its role in the cultural formation of the United States. *Four credit hours*. MS. GILKES

[277, 278] American Visual Arts Listed as Art 277, 278 (q.v.). Three credit hours.

[353] American Studies Theory and Methods A critical survey of the systems of thought and the methodological approaches which have structured our approach to the study of American culture. Utilizing texts which range from the classics to the cutting edge, the course will examine the progress of American Studies from a limited to a multi-disciplinary perspective. Four credit hours.

374 The Female Experience in America An introductory course focusing on major issues in twentieth-century American women's lives and on the issues in our own lives as women and men in contemporary American society: women's lives through the life cycle; women and creativity; women, race, and class; the new psychology of women; families old and new; women, religion, and spirituality; men in feminism; and methods and goals of social change. Concentration on our own life experiences and autobiographical fiction and theory by Alice Walker, Zora Neale Hurston, Gloria Naylor, Susan Kenney, and Carolyn Chute, among others. The class will participate in the production of media documentaries based on issues raised in the reading and discussions. Enrollment limited. *Four credit hours*. MS. MANNOCCHI

**376** Alternative American Cultures in Historical Context Designed primarily for majors, this course considers the American experience from such perspectives as gender, race, ethnicity, and class. Stressing discussion and writing, the course will focus on sources produced by "the other" as variously defined in different historical periods. Unifying topics may include political movements, urban life, religious diversity, first encounters, contemporary stereotypes, etc. Materials appropriate to the course's emphasis—political rhetoric, imaginative literature, travel literature, historical analysis, religious writings, oral histories and biographies, mass media, material culture, visual arts, music—will accentuate the interdisciplinary nature of the course. Four credit hours. MS. ROGERS

**377j** Topics in American Art and Material Culture Listed as Art 377j (q.v.). Three credit hours. MR. LUBIN

**483, 484** Senior Honors Project Majors may apply in their junior year for admission into the Senior Honors Project. Research conducted under the guidance of a faculty member and focused on an approved interdisciplinary topic leading to the writing of a thesis. Upon successful completion of the thesis and the major, the student will graduate "With Honors in American Studies." Enrollment limited. *Prerequisite*: A 3.25 major average and permission of the chair of the program. *Three credit hours*. FACULTY

**491, 492** Independent Study Individual study of special problems in American studies in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor and the program director. *One to four credit hours*. FACULTY

**493d** Seminar in American Studies An interdisciplinary seminar incorporating theoretical approaches to the study of American thought and culture. Topic will change each semester. Topics in 1991–92 include The American West in Context and Late Nineteenth-Century American Culture—An Interdisciplinary Approach. *Prerequisite:* Senior standing as American studies major. *Four credit hours*. MR. BASSETT AND MR. LUBIN

## Ancient History

In the Department of Classics.

[151] Introduction to Greek Civilization A survey of Greek culture from Homer to Plato, with special attention to the artistic developments that culminated in the Periclean age of Athens. Three or four credit hours.

**154 Roman History** A thematic and chronological approach to Roman history from the foundation of the city to its Christianization under the emperor Constantine. Topics include Roman imperialism, ancient economy, national self-image, and social and religious attitudes. *Three or four credit hours*. MR. CLUETT

#### 54 ANCIENT HISTORY, ANTHROPOLOGY

177 **Topics in Ancient History: Greek History** A survey of Greek history from the earliest times to the end of the Classical period. The Heroic Age, the city-state, ancient democracy, and the intellectual and cultural achievements of the ancient Greeks are among topics to be covered. *Three credit hours*. MR. ROISMAN

[178] Topics in Ancient History Two or three credit hours.

**252 Prehistoric** Greece Issues and problems in the art and archaeology of Greece from the neolithic to the geometric periods, with emphasis on Minoan and Mycenaean culture; interconnections in the Bronze Age world; archaeology as cultural history. *Three or four credit hours*. MRS. KOONCE

**†[352]** Athens in the Fifth Century The forces that shaped Athenian democracy and the cultural and political life distinctive of Periclean Athens. Three or four credit hours.

**†[353]** Greece in the Fourth Century The history of Greece from the death of Socrates to the rule of Alexander, drawing largely upon contemporary sources. *Prerequisite*: Permission of the instructor. *Three or four credit hours*.

**356** Alexander the Great The background of Alexander's invasion of Asia, his relations with Greeks and non-Greeks, his military conquests, his attempt at deification, and the creation of the Hellenistic states. Enrollment limited. *Three or four credit hours*. MR. ROISMAN

491, 492 Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. One to three credit hours. FACULTY

# Anthropology

In the Department of Sociology and Anthropology.

Chair, PROFESSOR THOMAS MORRIONE

Assistant Professors Suzanne Falgout<sup>1</sup>, Phyllis Rogers, and David Nugent; Visiting Assistant Professor Constantine Hriskos

Anthropology is the exploration of human diversity. Through the subdisciplines of cultural, linguistic, archaeological, and physical anthropology, it investigates the broad range of differences and similarities of humankind in both space and time. The program at Colby offers an introduction to the discipline and in-depth exposure to the variety of lifestyles in cross-cultural, comparative perspective. Students receive training in anthropological theory and field methodology; first-hand experiences and participation in field programs investigating cultural diversity are encouraged.

#### Requirements for the Major in Anthropology

Ten courses, including Anthropology 112, 313, 333, and 494; either Anthropology 113 or Religion 118; one culture area course selected from 119j, 211, 232, 233, 235, or 252; one topics course selected from 214, 236, 311, 316, or 331; and three courses chosen in consultation with the adviser with a view toward diversifying the program of study. A maximum of two courses selected from the following list of electives may be counted toward the major.

The point scale for retention of the major applies to all courses offered toward the major. No courses for the major may be taken satisfactory/unsatisfactory.

#### Requirements for the Minor in Anthropology

Six courses, including Anthropology 112; either Anthropology 113 or Religion 118; one culture area course selected from 119j, 211, 232, 233, 235, or 252; one topical course selected from 214, 217j, 236, 252, 311, 316, or 331; and two additional courses in anthropology (300- or 400-level) or selected from the following list.

The point scale for retention of the minor applies to all courses offered toward the minor. No courses for the minor may be taken satisfactory/unsatisfactory.

Courses offered in other departments which may be elected toward the anthropology major or minor:

American Studies: 276 African-American Culture in the United States.

East Asian Cultures and Languages: 252 Hell on Earth: Chinese Writers on Chinese Society; 271 Japanese Women through Films and Literature; 332 Money and Society in Japanese Literature. Economics: 275 Comparative Economic Systems; 293 Economic Development.

Geology: 141, 142 Introduction to Geological Science; 351 Principles of Geomorphology.

Government: 332 Political Development in the Third World.

History: 153 Western Africa and the Atlantic World; 154 Eastern and Southern Africa and the Indian Ocean World; 319 Economic History of Twentieth-Century Africa. Music: 232 Jazz.

Psychology: 233 Physiological Psychology; 374 Human Neuropsychology.

*Religious Studies*: 117j Passage to India; 211 Religions of India; 252 Village India; 317 Sikhism: Scripture, Sacred Music, and Art; 392 The Goddess.

Sociology: 235 Sociology of Religion; 355 African-American Women and Social Change; 356 African-American Religious Experience.

Spanish: 232 Spanish-American Culture.

<sup>1</sup>On leave full year.

112d Cultural Anthropology An intensive introduction to the study of different societies and cultures in the world, using a cross-cultural perspective on human behavior. Explores the diversity of human cultures from hunter-gatherers to industrialized city dwellers. Considers the implications of economic, social, political, symbolic, and religious systems for the lives of men and women. Topics include enculturation and transmitting values; group coherence and continuity; impact of material, technological, and social change; effects and culture contact. By emphasizing non-Western cultures, the course critically explores our accepted notions about human nature, society, and ideologies. *Four credit hours*. MR. NUGENT AND MR. HRISKOS

[113] Nature of Language Language is the principal means by which humans communicate. The course explores the nature of language, the unique biological characteristics of humans that make language possible, and the significance of language for human culture. Anthropological techniques to analyze languages around the world will be applied to the study of students' own speech community. Four credit hours.

115j Visual Anthropology via Film The course will explore the ways in which still photography shapes our understanding of the world's people and cultures. Instruction is designed to broaden the student's visual literacy, making the student use visual imagery as a source of cultural information. Discussions concerning objectivity, ethics, and ethnographic accuracy, in addition to readings, photographs and photography. Enrollment limited. *Three credit hours*. MS. ROGERS

†[118] Archaeology Listed as Religion 118 (q.v.). Three or four credit hours.

#### 56 ANTHROPOLOGY

[119] Pacific Exploration: January in Polynesia and Micronesia Following orientation lectures on the South Pacific, students study and travel in the Polynesian islands of Hawaii and the Micronesian islands of Pohnpei, Yap, and Guam. Enrollment limited. *Prerequisite*: Permission of the instructor. *Three credit hours*.

[134] Human Origins Introduction to the physical and prehistoric development of humankind, including primate and human evolution, "race" and racism, behavioral evolution, the Darwinian revolution, and modern evolutionary theory. *Four credit hours*.

174d1 Philosophical Anthropology: The Philosophy of Human Nature Listed as Philosophy 174 (q.v.). Four credit hours. MR. HUDSON

211 Indigenous Peoples and Cultures of North America An ethnographic survey of the sociocultural systems developed by indigenous Americans north of Mexico. Examines relationships between ecological factors, subsistence practices, social organizations, and belief systems, along with contemporary issues of change, contact, and cultural survival. *Four credit hours*. MS. ROCERS

**214d1** Religion, Magic, and Witchcraft Religion, magic, witchcraft? Science and the scientific method seem to have banished these beliefs to the domain of the irrational, the irrelevant. Is it true that these ideas and practices are no longer relevant to us, no longer influence us? A cross-cultural study of the nature and function of religious ideas, beliefs, and practices will be used to explain their universal significance and persistence. Four credit hours. MR. HRISKOS

217j Race and Ethnicity: Cross-cultural Perspectives An introduction to the main theories that attempt to explain race and ethnicity, including the notion that both are social and not biological entities. An examination of case studies from around the New World which reflect the ways that different socio-economic, political, and historical structuring contexts encourage varying forms of racial and ethnic identification. Application of the principles derived from this study to understanding racial and ethnic interaction and tensions in the contemporary United States. *Three credit hours*. MR. NUGENT

**219j** The Anthropology of Utopias; the Use and Abuse of the Primitive All Utopian literature involves anthropological reflection about primitive and pre-civilized societies; a historical dialogue with humanity's past that is used to compare and contrast the "civilized" state. Some notion of the Primitive (as primary human nature) is always implicit in the works of Utopian writers. Using this primitive/civilized paradigm, the course examines some of the classic utopic and dystopic literature of the west from Plato to the present. *Three credit hours*. MR. HRISKOS

[232] South Pacific Islands Culture Investigates both the fantasy and the reality of the exotic cultures of the South Pacific. Explores the original formation and peopling of the islands; the different social, political, economic, and religious systems that developed; and the history of foreign contact and culture change. *Four credit hours*.

**233** Anthropology of a Region A sociocultural analysis of a selected geographic area. In 1991–92: China, An Anthropological Study. An investigation of the institutions and social life that was China in the past and their transformation in the present, with focus on the relation of the state to local-level society. Ethnographic works, historical documents, and literature make a picture of life in China come alive. Formerly listed as Anthropology 297; students who took Anthropology 297 in the fall of 1990 may not enroll for credit. *Four credit hours*. MR. HRISKOS

235 Latin American Culture and Society An examination of the culture and political economy of rural Latin American societies, assessing the extent to which a historical approach which focuses on systems of values and institutions promoting social integration best explains these societies. *Four credit hours*. MR. NUGENT

[236] Human Emotions Consideration of the biological basis, socialization, social management, and cultural conception of emotions, and an examination of the expression of emotions in the context of recent Western intellectual history as well as in cross-cultural perspective. Enrollment limited. *Four credit hours*.

252 Hunger, Poverty and Population: The Anthropology of Development Examining theoretical approaches to problems of development in addition to anthropological studies of different forms of non-Western economies in an attempt to understand why the majority of aid and development programs provided by industrialized nations toward solving the problems of the Third World poverty have failed. The course will focus on evaluating the consequences of the kind of development advocated by different approaches to development and assessing the potential contribution of anthropological knowledge to help solve recurrent problems in development analysis. Enrollment limited. *Four credit hours*. MR. NUGENT

[254] Women of Color in the United States A survey spanning the experiences of the women of four racial minorities in the United States—American Indian, African-American, Hispanic-American, and Asian-American—from the first European contact to the present. The role of women within their respective traditional/pre-contact/Old World societies, their cultural orientation during the contact period, their experiences within the United States, and their impact on the culture of the dominant society in this country, covering as broadly as possible the cultural/historical experiences of each group and issues of class and gender roles for each sector of the group. *Four credit hours*.

[311] Psychological Anthropology Explores the role culture plays in shaping the world view, personality, and emotions of individuals. Examines cultural diversity in a wide range of human expressions, such as art, folklore, ritual, notions of self and other, altered states of consciousness, and mental disorders. *Prerequisite*: One course in anthropology or permission of the instructor. *Four credit hours*.

**313d2** Investigating Cultural Diversity Anthropologists are renowned for their research with exotic peoples in their natural settings. This course investigates the development of fieldwork as a means to investigate cultural diversity, both abroad and at home; it explores the goals and ethics of anthropological research; the nature of the fieldwork experience; the interaction with informants and the production of knowledge, and how we "write culture." It will reflect upon how the search for "other" also helps us to understand "self." Students will apply fieldwork concepts and methods to their own study of American culture. Enrollment limited. *Prerequisite:* One course in anthropology or permission of the instructor. *Four credit hours*. MR. NUGENT

[316] Peasant Society and Rural Rebellion Peasantries around the globe have played and continue to play a crucial role in forming the modern world as we know it (i.e., in France, Russia, China, Mexico, Vietnam, Cuba, Nicaragua, and Algeria). This course investigates the central features of peasant life and alternative explanations to understand the organization, behaviors, and beliefs of peasant societies in different parts of the world: Latin America and East Africa. Historical and comparative approaches will be used. Enrollment limited. *Prerequisite:* One course in anthropology or permission of the instructor. *Four credit hours*.

[331] Symbolic Anthropology Culture is a system of symbols and meanings shared by a group of people. An exploration of the processes of the construction and communication of meaning through symbols, using anthropological approaches to analyzing symbols, including structuralism, semiotics, interpretive anthropology, and cultural analysis. *Prerequisite:* One course in anthropology or permission of the instructor. *Three credit hours*.

**333 Contemporary Theory** An analysis of the contemporary state of anthropology as a discipline. Special attention to structural-functionalism, structuralism, cultural ecology, political economy, symbolic anthropology, post-structuralism, and reflexive anthropology. *Prerequisite:* One course in anthropology or permission of the instructor. *Four credit hours*. MR. HRISKOS

[398] Revelation and Revolution What is the cultural basis of Prophetic movements that lead to religious rebellions? Are they merely economic and political epiphenomena? Are religious rebellions always due to domination and exploitation from the outside? Or is that only part of the answer? An excursion into various charismatic movements should provide some insights for a general theory of the Revelation experience of the prophet-revolutionary; examples of religious rebellions drawn from America, Oceania, Africa, and China. Four credit hours.

491, 492 Independent Study Individual topics in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. *Two to four credit hours*. FACULTY

**494** Senior Seminar The meaning and development of anthropological perspectives. Individual projects developed from group discussion and consultation with instructor. *Prerequisite:* Anthropology 333 or permission of the instructor. *Four credit hours*. MS. ROGERS

# Applied Mathematics

Director, ASSISTANT PROFESSOR BEVERLY HAWK

ADVISORY COMMITTEE: Professors Hawk (Government), Homer Hayslett (Mathematics), Randy Nelson (Economics and Administrative Science), Leonard Reich (Administrative Science), Dale Skrien (Mathematics), and John Sweney (English)

A minor in applied mathematics/quantitative methods is offered. For further information, refer to the section on "Quantitative Analysis."

## Art

Chair, ASSOCIATE PROFESSOR MICHAEL MARLAIS

Professors Harriett Matthews and David Simon; Associate Professors Abbott Meader<sup>1</sup>, Gina Werfel<sup>1</sup>, David Lubin, Marlais, and Sonia Simon<sup>2</sup>; Visiting Assistant Professors Scott Reed<sup>2</sup> and NinaJerome; Visiting Instructor Gay Kempton<sup>2</sup>; Ziskind Lecturer Kenneth Ganza

The Colby Art Department includes practicing artists and art historians. With special studios for design, drawing, printmaking, and sculpture, as well as a college museum, the department features a curriculum that allows students not only to explore the intrinsic nature of materials

and techniques but also to develop their own expressive abilities. Art history offerings are designed with the recognition that the artistic products of any period are related to the social, political, and cultural concerns of that period. Students at Colby are able to approach art from both a practical and historical perspective, and thus are better able to understand the total experience of art.

#### Requirements for the Major in Art

Art 111, 112, 131, and one course in each of the following three groups:

(1) Art 311, 313, 314

(2) Art 331, 332, 334, 335

(3) Art 351, 352, 353

and three additional art courses, which may be art history or studio courses in any proportion. The point scale for retention of the major applies to courses taken in the department. No requirement for the major may be taken satisfactory/unsatisfactory.

Students planning to continue the study of art or art history in graduate school should confer with their advisers to be sure that they have planned a substantial and adequate course of study. Art history graduate programs generally require proficiency in at least one foreign language.

Attention is called to the interdisciplinary major in American studies.

Requirements for the Concentration in Studio Art

For students who are fulfilling the major in art, the studio concentration is offered to provide a broadly founded studio sequence that will assist in the development of skills and strengthen portfolios for any anticipated graduate studio work. Additional requirements are: Art 221 and 222, or its equivalent, and at least four courses in either sculpture, painting, or printmaking. Students should make every effort to complete the drawing requirement as early as possible in order that their advanced studio work can build upon that experience.

<sup>1</sup>On leave full year. <sup>2</sup>Part-time.

111, 112 Survey of Western Art A survey of the history of painting, sculpture, and architecture. First semester: Egyptian pyramids through Gothic cathedrals. Second semester: Renaissance Italy through contemporary America. *Four credit hours*. MR. SIMON, MR. MARLAIS, AND MS. SIMON

113j Photography Nongraded. Two credit hours. STAFF

114j Pottery Nongraded. Two credit hours. STAFF

115j Advanced Photography Nongraded. Two credit hours. STAFF

131d Foundations in Studio Art An introduction to the major materials and media of studio art through projects involving design, drawing, and painting. A range of aesthetic possibilities is presented, and the student is encouraged to explore a variety of approaches. No prior experience is required. Out-of-class work is essential. In very unusual cases, this course may be waived as a prerequisite for Art 221, 234, or 241, by the submission of a portfolio to the department in advance of registration. Enrollment limited. *Three credit hours*. FACULTY

157j Art of the Book To acquaint students with the nature of the book as a means of communication and as an art form, using both text and visual elements. Students will experience the creation of a book from selecting a subject through type and paper, illustration, photography, printmaking, design, and binding. Enrollment limited. *Prerequisite*: Art 131, 232, or submission of a portfolio to the instructor. *Three credit hours*. INSTRUCTOR

60 art

**221d** Drawing I Fundamentals of drawing and use of graphic materials. Concern for drawing as a means of developing visual and perceptual awareness. Out-of-class work is essential. *Prerequisite:* Art 131. *Three credit hours*. MS. MATTHEWS AND INSTRUCTOR

**222 Drawing II** Continuation of Art 221 with special concern for drawing the figure. Outof-class work is essential. *Prerequisite*: Art 221. *Three credit hours*. MS. MATTHEWS

**234d Printmaking I** Introduction to methods of generating images from printing surfaces. Concentration on relief printmaking. Out-of-class work is essential. *Prerequisite*: Art 131. *Three credit hours*. MR. REED

**235d2 Printmaking II** Further exploration of the materials, techniques, and ideas developed in Printmaking I. Out-of-class work is essential. *Prerequisite:* Art 234. *Three credit hours.* MR. REED

**241 Painting I** Oil painting from a variety of traditional and non-traditional sources. The aim is to develop breadth of vocabulary and formal understanding. Out-of-class work is essential. *Prerequisite:* Art 131. *Three credit hours*. MS. JEROME

**242 Painting II** Further exploration of the materials, techniques, and ideas developed in Painting I. Out-of-class work is essential. *Prerequisite:* Art 241. *Three credit hours*. MS. JEROME

**261** Sculpture I An introduction to form and ideas through the use of quick media. Outof-class work is essential. *Prerequisite*: Art 131 or permission of the instructor. *Three credit hours*. MS. MATTHEWS

**262** Sculpture II Further exploration of the materials, techniques, and ideas developed in Sculpture I, stressing more traditional materials. Out-of-class work is essential. *Prerequisite:* Art 261. *Three credit hours*. MS. MATTHEWS

[271] American Architecture Architecture, sculpture, and painting from colonial times to the twentieth century. Lectures and problems make use of the original material in the Colby collections. *Three or four credit hours*.

**273d2** The Arts of China A historical introduction to the major art forms of China painting, sculpture, bronze, and ceramics—from their beginnings in the Neolithic to the latter part of the traditional period in the eighteenth century, c. A.D. 1750. *Three or four credit hours*. MR. GANZA

**274d1** The Arts of Japan A historical introduction to the major art forms of Japan painting, sculpture, ceramics, architecture, and prints—from their beginnings in the pre-Buddhist age to the beginning of the modern era in the nineteenth century. *Three or four credit hours*. MR. GANZA

**275** Classics of the Sound Cinema Selected masterpieces of world cinema (1930–1960). Particular emphasis on developing skills for viewing films as a form of visual art. Enrollment limited. *Three credit hours*. MR. LUBIN

277 American Visual Arts I American art and culture from the colonial period, concentrating on the seventeenth, eighteenth, and nineteenth centuries, in terms of changing aesthetic standards as well as social and historical developments. Areas of study include the fine

arts, folk art, material culture, and mass media. Not open to students who have taken Art 271. Three credit hours. MR. LUBIN

[278] American Visual Arts II A continuation of Art 277, concentrating on the twentieth century. Three credit hours.

**297** Architecture An investigation into a variety of topics that are designed to question the nature of architecture, the role of the architect and the analysis of specific buildings. No background in art or art history is required. *Three credit hours*. MR. SIMON

[311] Art of the Aegean and Greece Architecture, sculpture, and painting from the development of the Minoan civilization through the fall of Rome. *Prerequisite:* Art 111 or permission of the instructor. *Three or four credit hours*.

**312** Etruscan and Roman Art Architecture, sculpture, and painting from the founding of Rome in the eighth century B.C. through its Christianization in the fourth century A.D. *Prerequisite:* Art 111 or permission of the instructor. *Three or four credit hours*. MR. SIMON

[313] Art of the Early Middle Ages Painting, sculpture, and architecture from A.D. 315 to A.D. 1000, from the Christianization of Rome through the development of Byzantine civilization in the East and through the Ottonian Empire in the West. *Prerequisite:* Art 111. *Three or four credit hours*.

**314d1** Art of the High Middle Ages Romanesque and Gothic painting, sculpture, and architecture in western Europe, from the reemergence of monumental stone sculpture through the exuberance of the Gothic cathedral. Influences of monastery, pilgrimage, and court on art from A.D. 1000 to 1400. *Prerequisite:* Art 111. *Three or four credit hours*. MS. SIMON

[331] Art of the Renaissance in Northern Europe The art of France, Germany, and the Lowlands in the fifteenth and sixteenth centuries, with emphasis on the major painters from Van Eyck to Brueghel. *Prerequisite*: Art 111 or 112, or permission of the instructor. *Three or four credit hours*.

[332] Art of the Early Renaissance in Italy The art of the fourteenth and fifteenth centuries in Italy, with emphasis on the major architects, sculptors, and painters. *Prerequisite:* Art 111, 112, or permission of the instructor. *Three or four credit hours*.

**334** Baroque and Rococo Art in Northern Europe Painting, sculpture, and architecture of the seventeenth and early eighteenth centuries in Flanders, Holland, England, France, and Germany. Relationships to Spain will also be explored. *Prerequisite:* Art 112 or permission of the instructor. *Three or four credit hours*. MS. SIMON

[335] Mannerism and Baroque Art in Italy Painting, sculpture, and architecture from the late works of Michelangelo in the sixteenth century through the domes of Guarini in the late seventeenth century. *Prerequisite:* Art 112. *Three or four credit hours*.

**341 Painting III** Further exploration of the materials, techniques, and ideas developed in Painting II. Out-of-class work is essential. *Prerequisite:* Art 242 and, starting with the Class of 1993, Art 221 (may be taken concurrently) or permission of the instructor. *Three credit hours*. MS. JEROME

#### 62 ART

**342 Painting IV** Further exploration of the materials, techniques, and ideas developed in Painting III. Out-of-class work is essential. *Prerequisite:* Art 341. *Three credit hours*. MS. JEROME

\*351 European Art, 1780–1880 Emphasis on European art of the neoclassic, romantic, realist, and impressionist movements. *Prerequisite:* Art 112. *Three or four credit hours*. MR. MARLAIS

**352 Modern Art, 1880–1914** History of avant-garde movements from post-impressionism through German expressionism. *Prerequisite:* Art 112. *Three or four credit hours*. MR. MARLAIS

[353] Contemporary Art, 1914 to the Present History of art from dada and surrealism to our own time. Emphasis on issues of art criticism as well as on current practices. *Prerequisite:* Art 112. Three or four credit hours.

**361** Sculpture III Further exploration of sculptural techniques and ideas. Out-of-class work is essential. *Prerequisite*: Art 262. *Three credit hours*. MS. MATTHEWS

**362** Sculpture IV Further exploration of sculptural techniques and ideas. Out-of-class work is essential. *Prerequisite*: Art 361. *Three credit hours*. MS. MATTHEWS

[376] Chinese Painting An introduction to the history and problems of Chinese painting. *Prerequisite:* Art 273 or permission of the instructor. *Three or four credit hours*.

377j Topics in American Art and Material Culture Three credit hours. MR. LUBIN

**391, 392** Independent Study: Studio Individual upper-level work in studio areas, intended to build upon course work, or to explore new areas in studio. Not meant to take the place of existing courses. *Prerequisite:* A year of studio course work and permission of the instructor. *One to four credit hours*. FACULTY

**441 Painting V** Further exploration of materials, techniques, and ideas developed in Painting IV. Out-of-class work is essential. *Prerequisite*: Art 342. *Three credit hours*. MS. JEROME

**442 Painting VI** Further exploration of materials, techniques, and ideas developed in Painting V. Out-of-class work is essential. *Prerequisite:* Art 441. *Three credit hours*. MS. JEROME

**461** Sculpture V Further exploration of sculptural techniques and ideas. Out-of-class work is essential. *Prerequisite:* Art 362. *Three credit hours*. MS. MATTHEWS

**462** Sculpture VI Further exploration of sculptural techniques and ideas. Out-of-class work is essential. *Prerequisite*: Art 461. *Three credit hours*. MS. MATTHEWS

**491, 492** Independent Study Individual study of special problems in the history or theory of the visual arts. *Prerequisite*: Permission of the instructor. *One to four credit hours*. FACULTY

**493d2** Seminar in Art History Varying topics are presented in which students are encouraged to question the nature of art history as a humanistic discipline through discussion and analysis of art of various periods. *Prerequisite*: Permission of the instructor. *Three or four credit hours*. MR. SIMON AND INSTRUCTOR

### Astronomy

#### In the Department of Physics and Astronomy.

**151** Stars and Stellar Systems An introductory survey of modern solar, stellar, galactic, and extragalactic astronomy for students of both science and non-science backgrounds. Basic astronomical concepts and recent discoveries will be treated from an astrophysical point of view. Lecture only. *Three credit hours*. MR. CAMPBELL

151L Stars and Stellar Systems Laboratory Theory and use of telescopes, and astronomical measurements. Students must be available Monday through Thursday evenings for telescope observing as weather permits. Enrollment limited. *Prerequisite:* Concurrent enrollment in Astronomy 151 and permission of the instructor. *One credit hour.* MR. CAMPBELL

**152 Historical and Planetary Astronomy** Listed as Science-Technology Studies 152 (q.v.). Three or four credit hours. MR. FLEMING

### Biology

#### Chair, PROFESSOR DAVID FIRMAGE

Professors Miriam Bennett<sup>1</sup>, Arthur Champlin<sup>2</sup>, Firmage, and F. Russell Cole; Associate Professors Bruce Fowles, Jay Labov<sup>1</sup>, and Frank Fekete; Assistant Professors Raymond Phillips<sup>3</sup>, Paul Greenwood, Maureen Whalen, and W. Herbert Wilson; Visiting Instructor Douglas McElroy; Research Associates Richard Moe and Betsy Brown; Teaching Associates Elizabeth Champlin, Timothy Christensen, and Lindsey Colby; Animal Care Technician Austin Segel

The Department of Biology provides its students with a background in, and an appreciation for, important aspects of classical and modern biology: genetics, anatomy, physiology, development, cell biology, molecular biology, evolution, behavior, ecology, and environmental biology. To provide a broad and comprehensive investigation of the biological sciences, the departmental curriculum emphasizes the study of the biology of plants, animals, and microorganisms. Graduates enroll in graduate programs in biology and in medical schools, dental schools, and veterinary colleges. Others are employed as research assistants or as teachers at the secondary level. Special facilities include the Perkins Arboretum, the Colby-Marston Bog, a laboratory equipped with both scanning and transmission electron microscopes, a laboratory microcomputer cluster, an isotope laboratory, a greenhouse, and animal rooms.

For all major programs offered by the department, the point scale for retention of the major applies to all courses required for the major and all elected biology courses. No requirement for the major may be taken satisfactory/unsatisfactory.

Requirements for the Basic Major in Biology

For students who have begun the major with Biology 121 and 122: In biology, 33 hours, including 121, 122, 271, 272, 393; Chemistry 141, 142; Mathematics 119 or 121 or 123, or equivalent, and one additional mathematics course numbered 112 or higher. The comprehensive examination in biology is to be taken in the senior year.

For students who begin the major with Biology 161 and 162: In biology, 33 hours, including 161, 162, 393, and at least one additional course with laboratory in population and evolutionary biology (Biology 211, 258j, 271, 351, 354, or 358j), in organismal biology (Biology 213, 234, 237, 254, 313, 357, or 373), and in cell and molecular biology (Biology 277, 279, 314, 332, 338, 372, 374, or 376); Chemistry 141, 142; Mathematics 119 or 121 or 123, or equivalent, and one

additional mathematics course numbered 112 or higher. The comprehensive examination in biology is to be taken in the senior year.

Students interested in teaching, private or public, are urged to read the education section of the catalogue and to contact a member of the Education Department. Students preparing for dental, medical, or veterinary schools must take a year of organic chemistry and a year of introductory college physics with laboratory; students preparing for graduate study in the biological sciences should also elect these courses.

Colby is a member of a consortium sponsoring the Center for Sustainable Development Studies, through which qualified students are provided the opportunity for a semester of study in Costa Rica. Studies combine biology and social/political issues to address sustainable development problems. See description under "Other Colby Abroad Programs."

Students are encouraged to take courses at summer laboratories; with prior approval, such courses may be credited toward the major requirement.

The Environmental Science Concentration is designed to provide students with a background to work in the environmental field or to continue on to graduate study in environmental science or in one of the other biological disciplines. In recent years, graduates have enrolled in graduate programs in ecology, marine biology, natural resource management, public policy, and environmental health. Others are employed by federal and state agencies, private and public organizations, and consulting firms.

For students who have begun the major with Biology 121 and 122: In biology, 33 hours, including 121, 122, 271, 272, 352 (with laboratory), 393, 493; Chemistry 141, 142; Economics 133, 231; Mathematics 112 (or 231), 119 (or 121 or 123); two courses selected from Environmental Studies 118, Geology 141, 142, 172, Chemistry 217, 241, 242, Physics 112. The comprehensive examination in biology is to be taken in the senior year. Students are encouraged to take at least one field-oriented courses uch as Biology 258j, 354, 358j, School for Field Studies Semester, Sea Semester, or similar approved programs.

For students who begin the major with Biology 161 and 162: In biology, 33 hours, including 161, 162, 271, 352 (with laboratory), 393, 493, and at least one additional course with laboratory in organismal biology (Biology 213, 234, 237, 254, 313, 357, or 373), and in cell and molecular biology (Biology 277, 279, 314, 332, 338, 372, 374, or 376); Chemistry 141, 142; Economics 133, 231; Mathematics 112 (or 231), 119 (or 121 or 123); two courses selected from Environmental Studies 118, Geology 141, 142, 172, Chemistry 217, 241, 242, Physics 112. The comprehensive examination in biology is to be taken in the senior year. Students are encouraged to take at least one field-oriented course such as Biology 258j, 354, 358j, School for Field Studies Semester, Sea Semester, or similar approved programs.

<sup>1</sup>On leave full year. <sup>2</sup>Resident director, Colby in Cork, full year. <sup>3</sup>Part-time; director of Computer Services.

115j Biology of Women An introduction to the biology of the human female throughout her entire lifespan. Topics include reproductive anatomy, the menstrual cycle and its hormonal control, aspects of sexual function and dysfunction, contraception, pregnancy and lactation. Lecture only. Does not satisfy the laboratory science distribution requirement. Cannot be counted toward the biology major. Formerly listed as Biology 198j. Enrollment limited. *Two credit hours*. MS. WHALEN

[121, 122] Introduction to Biology Four credit hours.

†[132] Aspects of Human Physiology An examination of the functions and structure of the human organism. Topics include the basics of biological chemistry and physics, the

physiology of metabolism, integration of information via nerves and hormones, circulation, mechanisms of breathing and gas exchange, reproduction, excretion, manipulation of the external and internal environment by muscles, and nutrition. History and methodology of human physiology as a science are examined throughout the course. Cannot be counted toward the biology major. *Prerequisite*: Biology 121 or 161. Enrollment limited. Lecture only: *three credit hours*; lecture and laboratory: *four credit hours*.

 $\dagger$ [133j] Impact of Microorganisms on Human Beings An exploration of the microbial world. Discussions and lectures will be based on the roles microorganisms play in disease, the food industry, ecology, energy generation, and biotechnology. Cannot be counted toward the biology major. Does not satisfy the laboratory science distribution requirement. Enrollment limited. *Two credit hours*.

[136] Horticulture Basic principles in the areas of plant structure and function will be covered and related to plant cultivation. Practical application of these principles will be discussed in areas such as lighting, propagation, pruning, and floriculture. One field trip will be taken. Does not satisfy the laboratory science distribution requirement. Cannot be counted toward the biology major. Enrollment limited. *Three credit hours*.

137 Plant Biology An introduction to the principles of biology as illustrated by plants, with emphasis on structure, activities, and reproduction of green plants. Lecture only. Does not satisfy the laboratory science distribution requirement. Formerly listed as Biology 138. Enrollment limited. *Three credit hours*. MR. FOWLES

[156] Invertebrate Zoology The morphology, functional anatomy, physiology, and classification of the invertebrates. Lecture and laboratory. *Prerequisite*: Biology 121 or permission of the instructor. *Four credit hours*.

161 Introduction to Biology: Organismal Biology Consideration of biological processes common to all organisms. Topics include organismal diversity; the acquisition, transformation and utilization of energy, nutrients and gases; production and removal of waste products; integration and transmission of information within and among organisms; and reproduction. Examples are drawn from plants, viruses and microorganisms, and animals. Credit cannot be obtained for both Biology 161 and 121. Lecture and laboratory. *Four credit hours*. MS. WHALEN, MR. FEKETE, AND MR. WILSON

162 Introduction to Biology: Genetics and Cell Biology An examination of inheritance and cellular function, with emphasis on experimental findings. Laboratory emphasizes an experimental approach. Credit cannot be obtained for both Biology 162 and 122. Lecture and laboratory. *Four credit hours*. MR. FOWLES AND MR. GREENWOOD

**†**[211] **Taxonomy of Flowering Plants** An introduction to the study of variation, evolution, and classification of flowering plants, and the techniques used by systematists in establishing relationships among plants. Identification of specimens that characterize the major families of flowering plants represented in the local flora is stressed. Lecture and laboratory. Formerly listed as Biology 311. *Prerequisite*: Biology 161, 162 (or 121, 122), or permission of the instructor. *Four credit hours*.

**†[212]** Heredity and Evolution An introduction to the concepts of population genetics and evolution. Formerly listed as Biology 112j. Lecture only. *Prerequisite*: Biology 162. *Three credit hours*.

[213] Biology of the Lower Plants Comparative studies of the morphology, development, physiology, and significance of algae, fungi, bryophytes, and ferns. Lecture and laboratory. Formerly listed as Biology 319. Prerequisite: Biology 161, 162, or permission of the instructor. Four credit hours.

[219] Environmental Science Basic concepts in ecology are examined in detail at the population, community, and ecosystem levels. The relevance of these concepts to current environmental problems is stressed. Does not satisfy the laboratory science distribution requirement. Cannot be counted toward the biology major. Enrollment limited. Three credit hours.

**\*234** Ornithology An introduction to the biology of birds. Topics include evolution and diversity, feeding and flight adaptations, the physiology of migration, communication, mating systems and reproduction, population dynamics and conservation of threatened species. Laboratory will include field trips to local habitats; occasional Saturday field trips. Lecture and laboratory. Enrollment limited. *Prerequisite:* Permission of the instructor. *Four credit hours*. MR. WILSON

[237] The Reproductive Biology of Flowering Plants A study of the flowering process and the mechanisms of pollination they employ. Pollinator-plant interactions will be stressed. Seed and fruit production and dispersal, including animal vectors, as well as vegetational propagation strategies will be considered. Lecture and laboratory. Formerly listed as Biology 337. Prerequisite: Biology 161, 162 (or 271, 272), or permission of the instructor. Four credit hours.

**†[254]** Marine Invertebrate Zoology The morphology, functional anatomy, and classification of the invertebrates. A weekend trip to the Maine coast included. Lecture and laboratory. *Prerequisite:* Biology 161, 162 (or 121, 122), or permission of the instructor. *Four credit hours.* MR. WILSON

**†[258j]** Ecological Field Study Intensive study in a south temperate or tropical area during the spring recess or the January term. Students must cover expenses. Limited scholarship funds are available. *Prerequisite:* Permission of the instructors. *Three credit hours*. FACULTY

**271** Introduction to Ecology Introduction to ecological principles—structure and function of ecosystems, patterns of distribution, energy flow, nutrient cycling, population dynamics, and adaptations of organisms to their physical environment. Application of these principles to current environmental problems. Field trips to sites representative of local terrestrial, freshwater, and marine ecosystems. Lecture and laboratory. *Prerequisite:* Biology 161 (or 121, 122), or permission of the instructors. *Four credit hours*. MR. COLE AND MR. FIRMAGE

[272] Cell Biology An introduction to the study of cellular and molecular biology: an examination of the structure and function of nuclear and cytoplasmic components, with emphasis on experimental findings. Instruction in basic histological and cytochemical techniques is included, in addition to studies of selected cellular properties. Lecture and laboratory. *Prerequisite:* Biology 161, 162 (or 121, 122), 271, or equivalent and Chemistry 141, 142 (may be taken concurrently), or permission of the instructor. *Four credit hours*.

277 Animal Cells, Tissues, and Organs Comparative studies of the organization of cells into tissues and organs in animals. Vertebrate systems are covered in detail; some invertebrate animals are also considered. Emphasis is on the relationship between cellular morphology and tissue and organ function. Laboratories emphasize the microanatomy of mammalian tissues and tissue culture techniques. Lecture and laboratory. Formerly listed as Biology 315. Prerequisite: Biology 161, 162 (or 271, 272), or permission of the instructor. Four credit hours. MR. GREENWOOD

**279** Genetics The mechanisms of inheritance, with emphasis on experimental findings. The physical and chemical bases for the behavior of genes in individuals and populations are examined. Formerly listed as Biology 371. *Prerequisite:* Biology 161, 162 (or 121, 122), or permission of the instructor. Lecture only: *three credit hours*; lecture and laboratory: *four credit hours*. MR. MCELROY

[313] Vertebrate Zoology A study of the vertebrates with emphasis on functional anatomy, natural history, and evolutionary relationships. The adaptive strategies of vertebrates to interactions with their environment are considered. Species common to New England are emphasized. Lecture and laboratory. *Prerequisite*: Biology 161, 162, or permission of the instructor. *Four credit hours*.

**314 Plant Physiology and Molecular Biology** The essential mechanisms of plant functions at the organismal and molecular levels. Lecture and laboratory. *Prerequisite*: Biology 161, 162 (or 271, 272), Chemistry 141, 142, or permission of the instructors. *Four credit hours*. MR. FOWLES AND MS. WHALEN

[318] Microbiology The biology of bacteria, viruses, and microscopic eukaryotic organisms. The aims of the course are to develop general knowledge in this area and to give practical experience in techniques. Lecture and laboratory. *Prerequisite*: Biology 271 and 272, or permission of the instructor. *Four credit hours*.

**†[332]** Developmental Biology A study of development, with emphasis on the experimental findings that have led to present ideas of the morphological and chemical processes underlying the development and growth of organisms. Lecture and laboratory. *Prerequisite:* Biology 161, 162 (or 271, 272), or permission of the instructor. *Four credit hours*.

**338** Bacteriology and Immunology An introduction to immunology and pathogenic bacteriology. Mechanisms of the mammalian immune response against infectious agents of disease will be considered; aims of the course are to develop general knowledge in these areas and to provide practical experience in laboratory techniques. Lecture and laboratory. *Prerequisite:* Biology 161, 162 (or 271, 272), Chemistry 141, 142, or permission of the instructor. *Four credit hours*. MR. FEKETE

**351** Microbial Ecology The ecology of microorganisms and viruses associated with plants and animals, as well as terrestrial and aquatic microorganisms and their general role in the environment. Laboratories include both field- and laboratory-based components in the study of microbial ecology. Lecture and laboratory. *Prerequisite:* Biology 161, 162 (or 271, 272), Chemistry 141, 142, or permission of the instructors. *Four credit hours*. MR. FEKETE AND MR. FOWLES

**352** Ecological Theory An examination of the theoretical aspects of population and community ecology, emphasizing population regulation, demography, trophic relationships, community structure and organization, and succession. Coevolutionary interactions between plants and animals are considered. Relevance of ecological theory to the solution of environmental problems is discussed. Lecture and discussion. Augmented credit based on the addition of laboratory work. *Prerequisite:* Biology 271 or permission of the instructors. Lecture only: *three credit hours*; lecture and laboratory: *four credit hours*. MR. FIRMAGE AND MR. COLE

**\*354 Marine Biology** A study of marine organisms and their environment with emphasis on coastal systems. Laboratory exercises will familiarize students with marine organisms, their environment, and the quantitative methods used to study them. Occasional weekend field trips to the coast. Lecture, laboratory, and discussion. Enrollment limited. *Prerequisite:* Biology 161, 162 (or 271), or permission of the instructors. *Four credit hours*. MR. COLE AND MR. FIRMAGE

**357 Physiological Ecology** An examination of the physiological and behavioral adaptations of organisms to environmental conditions and consideration of how such adaptations affect the interactions of organisms. Examples will be drawn from terrestrial, marine, and freshwater plants and animals. The optional laboratory will involve field trips to several habitats in Maine. *Prerequisite:* Biology 161, 162 (or 121, 122), and 271, or permission of the instructor. Lecture: *three credit hours*; lecture and laboratory: *four credit hours*. MR. WILSON

**358j** Ecological Field Study Intensive study in a south temperate or tropical area during the spring recess or the January term. Students must cover expenses. Limited scholarship funds are available. *Prerequisite:* Permission of the instructors. *Three credit hours*. MR. COLE AND MR. GREENWOOD

**372** Cellular Dynamics Investigations of major active and passive processes of eukaryotic cells. Emphasis is on various aspects of thermodynamics and cellular energetics, including the dynamics of respiration and photosynthesis, transport mechanisms, intracellular trafficking, motility, cellular communication, and second-messenger systems. Laboratory exercises investigate many of the processes discussed in lecture. Lecture and laboratory. *Prerequisite:* Biology 161, 162 (or 271, 272), and Chemistry 141, 142, or permission of the instructor. *Four credit hours*. MR. GREENWOOD

[373] Animal Behavior An examination of animal behavior from a biological perspective. Topics include the control, development, function, and evolution of behavior. *Prerequisite:* Biology 161, 162 (or 271), or permission of the instructor. Lecture only. *Three credit hours*.

**†[374]** Topics in Neurobiology Lectures, discussions, and readings on the functional organization of nervous systems, and on how nervous information is received, coded, stored, and transmitted by living organisms. Augmented credit of one hour based on the addition of laboratory work. *Prerequisite:* Biology 161, 162 (or 272), or permission of the instructor. Lecture only: three credit hours; lecture and laboratory: four credit hours.

[375] Problems in Comparative Animal Physiology Studies of the manners in which selected invertebrates and vertebrates cope with their functional problems. Both ecological and evolutionary correlations are stressed. Lecture only. Augmented credit of one hour based on the addition of an independent laboratory. *Prerequisite:* Biology 271 and 272, or permission of the instructor. Lecture only: *three credit hours*; lecture and laboratory: *four credit hours*.

**376** Molecular Genetics Listed as Chemistry 376 (q.v.). Prerequisite: Biology 162 or 272 and Chemistry 242 (may be taken concurrently), or permission of the instructors. Four credit hours. MS. WHALEN AND MR. BOURGAIZE

**†[379]** Electron Microscopy Principles and practice of transmission and scanning electron microscopy, including electron optics, imaging, and x-ray microanalysis. The routine operation of both the TEM and SEM are presented and practiced, as are the principles and techniques of sample preparation from living materials. The interpretation and evaluation of electron photomicrographs are emphasized. Students have an opportunity to develop further their techniques and expertise in the area of greatest interest to them. Enrollment limited. Lecture and laboratory. *Prerequisite*: Biology 161, 162 (or 121, 122), Chemistry 141, 142, standing as a junior or senior major in one of the natural sciences, and permission of the instructor. *Four credit hours*.

**393d Biology Seminar** Discussion of contemporary topics in biology. Choice of several topics. Nongraded. *Prerequisite:* Junior or senior standing as a biology or geology-biology major. *Two credit hours*. FACULTY

[473] Topics in Molecular Biology Studies of the molecular biology of eukaryotic organisms emphasizing the genetics, biochemistry, and physiology of plants. Lectures, discussions, readings, and laboratory exercises will address the organization and function of the genome, functions of chloroplasts and mitochondria, development and differentiation, stress responses, and genetic engineering. Lecture and laboratory. *Prerequisite:* Biology 271 and 272, Chemistry 241 and 242 (may be taken concurrently), or permission of the instructor. *Four credit hours*.

491, 492 Independent Study Prerequisite: Permission of the department. One to four credit hours. FACULTY

**493 Problems in Environmental Science** Causes of and solutions to selected environmental problems are studied through lectures, discussions, and guest presentations. Group projects are conducted to teach methods used by private firms and governmental agencies to investigate environmental problems. Enrollment limited. *Prerequisite*: Biology 271 and permission of the instructors. *Four credit hours*. MR. COLE, MR. FIRMAGE, AND MR. FEKETE

### Chemistry

#### Chair, PROFESSOR WAYNE SMITH

Professor Smith; Associate Professor Thomas Shattuck<sup>1</sup>; Assistant Professors R. Daniel Libby, David Bourgaize, Whitney King, and Julie Millard; Visiting Assistant Professor Margaret Eastman; Teaching Associate Jean McIntyre; Teaching Assistant Rosemary Flanagan

Students in the Chemistry Department are provided a firm foundation in the fundamental principles of the discipline. The student major has access to a wide range of instruments for course work and research projects under supervision of a faculty that includes teaching specialists in analytical, environmental, inorganic, organic and physical chemistry, biochemistry, and molecular biology. Many students go on to graduate school in chemistry or biochemistry or to careers in medicine, dentistry, health-related fields, and industrial research. Other career choices in recent years have included patent law, chemical engineering, environmental studies, computer sciences, and molecular biology.

The department offers several programs: (1) the chemistry major, (2) the chemistry-ACS major (accredited by the American Chemical Society), (3) the chemistry-biochemistry major, (4) the chemistry-public policy minor, (5) the chemistry-environmental sciences concentration, and (6) the chemistry minor. Of these majors, the ACS major is focused most sharply toward graduate work in chemistry. It should be noted that chemistry majors who intend to apply for admission to medical, dental, or veterinary schools must take a biology course with laboratory. For maximum flexibility, students are encouraged to take Chemistry 141 and 142 in their first year. All prospective majors should meet with the chair of the department as early as possible to plan their full chemistry programs.

Attention is called to the minor in applied mathematics and to the interdepartmental geology-chemistry major.

Students interested in teaching, private and public, are urged to read the education section of the catalogue and to contact a member of the Education Department.

Requirements for the Major in Chemistry

Chemistry 141, 142, 241, 242, 331, 341, 342, 493; Mathematics 121, 122 or 123, 124; Physics 141, 142 (or 121, 122 or 132, 231).

Requirements for the Major in Chemistry-ACS

All courses required for the basic major, plus Chemistry 332, 411, 413, and six additional credit hours of 400-level courses. Substitution of upper-level courses from other departments in the science division is often possible.

#### Requirements for the Major in Chemistry-Biochemistry

Chemistry 141, 142, 241, 242, 341, 367 (with laboratory), 368 (with laboratory), 493; Mathematics 121, 122 or 123, 124; Physics 141, 142 (or 121, 122); Biology 161, 162 (or 121, 122), 272, and either Chemistry 376 or one additional biology course numbered 200 or higher.

Requirements for the Concentration in Chemistry-Environmental Sciences All courses required for the chemistry major; Chemistry 217, 483 or 484; Economics 133, 134, 231; Biology 161, 162 (or 121, 122) or Geology 141, 142.

Additional Requirements for All Majors in Chemistry Department Each major must complete a chemistry-related independent study project equivalent to two (or preferably three) credit hours. Normally this requirement is satisfied through a January Program or summer research project and forms the basis of the seminar presentation. In certain cases, January Program courses may be substituted.

The point scale for retention of the major applies to all required courses and all elected chemistry courses. No requirement for the major may be taken satisfactory/unsatisfactory.

Seminars are held on Tuesday evenings; chemistry majors are expected to attend, and seniors are required to participate.

Majors in chemistry who have completed the required junior-level courses for the major may elect an honors research project with approval of a faculty sponsor in the department. On successful completion of the work of the honors research program and of the major, their graduation from the College will be noted as being "With Honors in Chemistry." Attention is also called to the Senior Scholars program.

#### Requirements for the Minor in Public Policy

Chemistry 141, 142, 241, 242, 331, 341, 342; Economics 133; Government 111, 317; Mathematics 121, 122 (or 123, 124); Physics 141, 142 (or 121, 122); Public Policy 493; two courses selected from Economics 231, Government 273, 275, 392, or Economics 223 and 312, or Economics 223 and 332; an internship in the junior year.

#### Requirements for the Minor in Chemistry

Chemistry 141, 142, 241, and at least 10 credit hours in three courses selected from the following: Chemistry 217, 242, 331, 332, 341, 342, 367, 368, 376, 411, 431, 432, or 434. Students are strongly advised to consult with a member of the chemistry faculty to select a logical grouping of courses for the minor.

<sup>1</sup>On leave full year.

112 Chemistry for Citizens Basic chemical principles and their application to topics of current concern, such as environmental problems, energy, nuclear reactions, recycling, health, and consumerism. Intended as a course for nonscience majors. Students with prior credit for Chemistry 141 may not receive credit for Chemistry 112. Laboratory portion is optional. *Three credit hours*. MS. MILLARD

112L Laboratory: Chemistry for Citizens Chemistry 112 and 112L may be used to satisfy

the laboratory science distribution requirement. Enrollment limited. *Prerequisite*: Concurrent enrollment in Chemistry 112 and permission of the instructor. *One credit hour.* MS. MILLARD

115 Chemicals and Society Discussion will focus on the original elements (fire, water, earth, air) as an introduction to modern chemical principles and their connection to current problems such as energy sources, mineral resources, and pollution. A recurring theme is that of technological traps. Intended as a nonlaboratory course for nonscience majors. *Three credit hours*. MR. SMITH

118d1 Biotechnology Various aspects of biotechnology are explored, including the science behind this field; practical applications are considered, as well as the future impact of biotechnology. Intended as a course for nonscience majors, it is not appropriate for students majoring in chemistry or biology. Enrollment in laboratory is limited. Lecture only: *three credit hours*. Lecture and laboratory (satisfies the laboratory science distribution requirement): *four credit hours*. MR. BOURGAIZE

141, 142 General Chemistry Fundamental principles, with examples selected from inorganic chemistry; stoichiometry; atomic theory; chemical bonding; thermochemistry; gases, liquids, and solids; solutions; chemical equilibria; electrochemistry; chemistry of certain important elements; radioactivity. Lecture, discussion, and laboratory. *Prerequisite*: Chemistry 141 is prerequisite for 142. *Four credit hours*. MR. KING AND MR. SMITH

[217] Environmental Chemistry Application of chemical principles to such topics as acid deposition, global warming, atmospheric ozone loss, corrosion, aquatic eutrophication, and the fate and toxicity of heavy metals and organic pollutants in soils and natural water systems. The optional laboratory will emphasize the use of modern instrumental techniques for the analysis of environmental samples. Enrollment in the laboratory is limited. *Prerequisite*: Chemistry 142. Lecture only: *three credit hours*; lecture and laboratory: *four credit hours*.

[231j] Gas Chromatography/Mass Spectrometry The principles of operation and modern analytical practices, including chromatographic theory, mass spectrometric instrumentation, and the interpretation of mass spectra. Laboratory exercises in column preparation, flow rate effects on resolution, quantitative methods of analysis, optimization strategies, computer data manipulations, head space analysis, and amino acid analysis. Lecture and laboratory. Enrollment limited. *Prerequisite:* Chemistry 241. *Two credit hours*.

241, 242 Organic Chemistry Theories encountered in Chemistry 141, 142 are used as the basis for a detailed mechanistic study of the relationships among structure, reactivity, and synthesis of organic compounds. Lecture, discussion, and laboratory. The laboratory explores the use of separation techniques, synthesis, and spectral techniques in organic chemistry. *Prerequisite:* Chemistry 142; Chemistry 241 is prerequisite for 242. *Five credit hours*. MR. LIBBY

[255j] Nuclear Magnetic Resonance The theory and practice of one- and two-dimensional NMR. Spectral interpretation, the theory of pulsed techniques, and Fourier transformation will be discussed for solution spectroscopy. Examples include complex organic species and biological macromolecules, including proteins. Laboratory exercises include sample preparation and common two-dimensional experiments, including polarization transfer (INEPT), chemical shift correlation (COSY, HECTOR), and nuclear overhauser effect (NOSEY) spectroscopy. Lecture and laboratory. Enrollment limited. *Prerequisite*: Chemistry 241. *Two credit hours*.

## 72 CHEMISTRY

**331 Chemical Methods of Analysis** A study of fundamentals of analytical chemistry. Lectures are devoted to principles underlying chemical analysis; acid/base, redox, and complex equilibria; and quantitative treatment of data. *Prerequisite:* Chemistry 142. *Four credit hours*. MR. KING

**332** Instrumental Methods of Analysis Instruction in instrumental methods, including modern electroanalytical methods, absorption spectroscopy, fluorescence, nuclear magnetic and mass spectrometry, and chromatography. *Prerequisite:* Chemistry 331, 342 (may be taken concurrently). *Four credit hours*. MR. KING

341, 342 Physical Chemistry The laws and theories of chemical reactivity and the physical properties of matter. Emphasis is placed on chemical equilibrium, molecular bonding, and the rates of chemical reactions. Major topics in 341: thermodynamics, solutions, and reaction kinetics; in 342: quantum mechanics, spectroscopy, and statistical mechanics. *Prerequisite:* Chemistry 142, Physics 142 (or 122 or 231), and Mathematics 122 or 124; Chemistry 341 is prerequisite for 342. *Five credit hours*. MS. EASTMAN

**367 Biomolecules** Introduction to the structure, function, control, and cellular organization of each of the broad categories of biomolecules: proteins, nucleic acids, carbohydrates, and lipids. *Prerequisite:* Chemistry 242. Lecture only: *three credit hours*; lecture and laboratory: *four credit hours*. MS. MILLARD

**368** Metabolism and Bioenergetics The generation and storage of metabolic energy, the synthesis of precursors to biological macromolecules, and control of these processes. *Prerequisite:* Chemistry 367. Lecture only: *three credit hours*; lecture and laboratory: *four credit hours*. MR. BOURGAIZE

**376** Molecular Genetics Studies of the molecular biology of prokaryotic and eukaryotic organisms emphasizing genetics, biochemistry, and physiology. The structure of synthesis of DNA and RNA, protein synthesis, mechanisms of gene expression, and genetic engineering. Lecture and laboratory. Formerly listed as Chemistry 378. *Prerequisite*: Biology 162 or 272 and Chemistry 242 (may be taken concurrently), or permission of the instructors. *Four credit hours*. MS. WHALEN AND MR. BOURGAIZE

**411 Inorganic Chemistry** Current models and concepts in inorganic chemistry, with emphasis on both structural and reaction aspects. Topics include bonding and structure, periodic properties, acid-base theories, nonaqueous solvents, applications of thermodynamics, coordination compounds, and selected areas of descriptive chemistry of current interest. Lecture and discussion. *Prerequisite*: Chemistry 342. *Four credit hours*. MR. SMITH

**413 Integrated Laboratory Studies** Synthesis and characterization of organic, inorganic, and organo-metallic compounds. *Corequisite:* Concurrent enrollment in either Chemistry 411 or 431. *One credit hour*. MR. LIBBY AND MR. SMITH

**431 Physical Organic Chemistry** Qualitative molecular orbital theory is used to study the effects of orbital symmetry on the course of pericyclic reactions. Physical methods for determining organic reaction mechanisms are also explored. Lecture. *Prerequisite:* Chemistry 242, 342 (may be taken concurrently). *Three credit hours*. MR. LIBBY

432 Advanced Organic Chemistry The logic and methods of organic synthesis are explored. The elementary organic reactions studied in Chemistry 241, 242 are augmented and used in the synthesis of biologically and chemically important molecules. The logic of designing

synthetic pathways is stressed. Lecture. *Prerequisite*: Chemistry 242 or equivalent. *Three credit* hours. MR. LIBBY

**434** Symmetry and Spectroscopy Use of principles of symmetry and group theory as an aid in understanding chemical bonding and interpreting molecular spectroscopy. Reaction mechanisms of transition-metal complexes and organo-metallics. *Prerequisite*: Chemistry 411. *Three credit hours*. MR. SMITH

**483, 484** Special Topics in Environmental Chemistry Primarily a laboratory course with emphasis on independent studies of environmentally related topics. A paper and oral presentation are required. *Prerequisite:* Chemistry 217 and permission of the department. *One to three credit hours*. FACULTY

**491, 492** Independent Study Laboratory work of a research nature may be arranged with the instructor. Three to nine hours per week. One to three credit hours. FACULTY

**493, 494** Seminar Discussion of topics of current interest in all areas of the chemical literature. 493 is nongraded. *Prerequisite*: Permission of the instructor. *One credit hour*. FACULTY

# Chinese

In the Department of East Asian Cultures and Languages.

125, 126 Elementary Chinese Introduction to spoken and written Mandarin Chinese, to provide a thorough grounding in all the language skills: speaking, listening, reading, and writing. *Prerequisite*: Chinese 125 is prerequisite for 126. *Five credit hours*. MR. LO

**127, 128** Intermediate Chinese A continuation of Chinese 126, with greater emphasis on written Chinese. *Prerequisite*: Chinese 126; Chinese 127 is prerequisite for 128. *Four credit hours*. MR. XU

**321, 322** Advanced Chinese Advanced Chinese language, concentrating on reading, writing, and speaking. *Prerequisite:* Chinese 128 or permission of the instructor; Chinese 321 is prerequisite for 322. *Two to four credit hours*. MR. LO

**491,492** Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor. *Two to four credit hours*. FACULTY

# Classics

Additional courses offered by the Classics Department are listed separately under "Ancient History," "Greek," and "Latin."

Chair, ASSOCIATE PROFESSOR HANNA ROISMAN

Professors Peter Westervelt<sup>1</sup>, Dorothy Koonce, and Peyton Helm<sup>2</sup>; Visiting Associate Professors H. Roisman and Joseph Roisman<sup>3</sup>; Taylor Lecturer Ronald Cluett

Students in classics may concentrate in either Greek or Latin literature and civilization or in a combination of both. A wide variety of courses in both fields is provided through the Taylor

Lectureship in Classics, which brings a different specialist each year to teach in his or her chosen area of interest. There is also the opportunity to study for a year in Greece or Rome in programs especially designed for American students, as well as occasion for experience in field archaeology through arrangement with other institutions.

## Requirements for the Major in Classics

Two courses numbered 200 or higher in Greek or Latin. Six additional courses selected from at least two of the following categories: two or more courses numbered 300 or higher in the ancient language elected above; two or more courses in ancient history; two or more courses numbered 200 or higher in the other ancient language; two or more courses elected from Classics 133, 177, 178, 232, 234, Art 311, Philosophy 331, or the equivalent.

The point scale for retention of the major applies to all courses in the department. No requirement for the major may be taken satisfactory/unsatisfactory.

### Requirements for the Major in Classics-English

In classics: either three years of Latin in courses numbered 200 or higher or three years of Greek. In English: six semester courses approved by the departments.

### Requirements for the Major in Classics-Philosophy

In classics: either three years of Latin in courses numbered 200 or higher or three years of Greek, subject to departmental approval.

In philosophy: 152; 111 or 211; 331, 332; 491 or 492.

The point scale for retention of each of the above majors applies to all courses that may be credited toward the major. No requirement for the major may be taken satisfactory/unsatisfactory.

The minor in Classical Civilization is presented for students with an interest in Greek and Roman culture who do not wish to pursue the study of the ancient languages. Students in this program are strongly urged to take advantage of the opportunity to study abroad in Greece or in Italy.

### Requirements for the Minor in Classical Civilization

Classics 133 or Ancient History 151; Classics 491 or 492; five additional courses, including at least one at the 300 level, selected from the following: Classics 177, 178, 232, 234, Ancient History 154, 177, 178, 252, 352, 353, Art 311, or Philosophy 331.

The following are courses in classical literature in translation. These courses require no knowledge of Latin or Greek. Attention is called also to courses in ancient history.

<sup>1</sup>On leave full year.

<sup>2</sup>Part-time; vice president for development and alumni relations.

<sup>3</sup>Joint appointment in classics and history.

133 Greek Myth and Literature An introduction to Greek mythology with readings that concentrate on a few selected myths to be studied in detail. Readings will include the *lliad*, the Odyssey, and selected tragedies that illustrate the development of these myths. Three or four credit hours. MRS. ROISMAN

135j History and the Homeric Epics An exploration of the Homeric epics, their historical context, and the extent to which they can be used as historical source material. Readings will include the *Iliad* and the *Odyssey* as well as secondary scholarship on Homeric poetry and Greek history. Enrollment limited. *Three credit hours*. MR. HELM

139j Athens, Rome, and Jerusalem The Greek, Roman, and Jewish civilizations came into direct contact and also conflict with each other. How did they first make contact? What impact did they have on one another? What were their views of each other? Were their values, beliefs, and ambitions irreconcilable or amenable to peaceful coexistence? The periods when Greeks,

Romans, and Jews fought, yet also lived together in peace. Readings in translation include Plutarch, Josephus, and the New Testament. *Two or three credit hours*. MR. ROISMAN

[177, 178] Topics in Classics Two or three credit hours.

**232** Greek Tragedy The tragedies of Aeschylus, Sophocles, and Euripides. Study of the themes of tragic drama, its form and meaning in the fifth century B.C. and today; discussion of possible stagings, significance of variations in the treatment of myth, and political background. Special attention to critical writings on methods, spirit, and purpose of tragedy. All readings in translation. *Three or four credit hours*. MRS. ROISMAN

**†[234]** The Heroic Ideal in Early Greek Poetry Particular emphasis on Homer's *Iliad* and the odes of Pindar, with some attention to modifications of the heroic ideal that appear in Attic tragedy. Three or four credit hours.

**491, 492** Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor. *One to three credit hours*. FACULTY

## **Computer Science**

In the Department of Mathematics and Computer Science.

Associate Professor Dale Skrien; Assistant Professors Robert Fisch, Batya Friedman, and James Northrup

The department offers a concentration in computer science for students majoring in mathematics as well as a minor in computer science. It is not possible to take both of these options. A mathematics major with a minor in computer science has slightly more requirements than a mathematics major with a concentration in computer science.

Requirements for the Minor in Computer Science

Computer Science 115, 132, 231, at least three credits of 491 or 492, Mathematics 274 or Philosophy 152, Physics 153.

The point scale for retention of the minor applies to all courses in the minor. No requirement for the minor may be taken satisfactory/unsatisfactory.

See Mathematics section for requirements for the mathematics major with a concentration in computer science.

113d Survey of Computer Science A survey course in computer science providing a broad overview. Topics include history, applications, programming, hardware, theory of computation. A weekly laboratory session will center around Hypercard. No previous computer experience required. Four credit hours. MR. FISCH AND MS. FRIEDMAN

**115d Structured Programming and Elementary Algorithms** Problem solving and programming in a high-level language such as Pascal. Topics include algorithm development, control structures, data structures, and their implementation. *Four credit hours*. MR. FISCH AND MS. FRIEDMAN

**231 Data Structures and Algorithms** An introduction to the primary data structures and the algorithms that operate on them. Data structures to be studied include arrays, graphs, trees, stacks, and queues. The algorithms include searching, sorting, insertion, deletion, and traversal. *Prerequisite:* Computer Science 115. *Four credit hours*. MS. FRIEDMAN AND MR. SKRIEN

76 COMPUTER SCIENCE, CREATIVE WRITING, EAST ASIAN CULTURES AND LANGUAGES

**232** Computer Organization An introduction to computer organization: memory, processors, input/output, virtual machines, and assembly language. Formerly listed as Computer Science 132. *Prerequisite:* Computer Science 115 or permission of the instructor. *Four credit hours*. MR. SKRIEN

378 Introduction to the Theory of Computation Listed as Mathematics 378 (q.v.). Prerequisite: Mathematics 274. Three credit hours. MR. DEVLIN

**491,492** Independent Study Independent study in an area of computer science of particular interest to the student. *Prerequisite*: Permission of the instructor. *One to four credit hours*. FACULTY

## Creative Writing

Director, PROFESSOR SUSAN KENNEY

ADVISORY COMMITTEE: Professors James Boylan, Peter Harris, Kenney, Mary Ruefle, Richard Russo, and Ira Sadoff (all of the English Department faculty)

A minor in creative writing may be elected by students majoring in any department of the College. The minor is designed to enhance existing major programs, to add structure and a sense of purpose to those students already committed to creative writing, and to encourage the consideration of serious writing graduate programs.

### Requirements for the Minor in Creative Writing

The minor consists of at least one introductory, one intermediate, and one advanced writing course, plus one of the following: an independent study, an Honors project, a Senior Scholar project, the repetition of the advanced writing course, or a workshop in the other genre (for poets, a fiction workshop; for fiction writers, a poetry workshop). Admission to advanced and intermediate writing courses is by manuscript submission. Because of enrollment pressures, students cannot be guaranteed admission into creative writing courses.

Students will also take three allied courses in the English Department, approved by the creative writing adviser, that will be useful to the student's development as a writer. For example, a fiction-writing student might take the Short Story, the Modern American Novel, or Contemporary Fiction; a poetry-writing student might elect The Romantics, the Seventeenth Century, Modern American Poetry, or Contemporary American Poetry.

No requirement for the minor may be taken satisfactory/unsatisfactory.

## East Asian Cultures and Languages

Additional courses offered by the department are listed separately under "Chinese" and "Japanese."

#### Director, PROFESSOR LEE FEIGON

ADVISORY COMMITTEE: Professors Roger Bowen (Government), Feigon (History), Kenneth Ganza (Art and East Asian Cultures and Languages), Noriko Katagiri (Japanese), Yuet Keung Lo (Chinese), Tamae Prindle (Japanese), Nikky Singh (Religious Studies), Xu Tao (Chinese)

The East Asian cultures and languages major contributes a new dimension to the traditional liberal arts curriculum by exposing the student to rich cultures outside the scope of Western civilization. Study abroad during the junior year is strongly encouraged; see "Junior Year

Abroad" for information about the Associated Kyoto Program and the Colby program in Beijing at People's University. Other foreign study possibilities include Hong Kong, Taiwan, and Korea. Requirements for the Major in East Asian Cultures and Languages

A minimum of two years of training in Chinese or Japanese language and twenty-one additional credithours to include East Asian 151, 152, one course in Chinese or Japanese literature, at least one seminar or independent study devoted to East Asia, and any other course dealing with East Asian Cultures and Languages from the departments of art, government, history, literature, philosophy, or religious studies.

The point scale for retention of the major applies to all courses offered toward the major. No requirement for the major may be taken satisfactory/unsatisfactory.

Courses Approved for the Major in East Asian Cultures and Languages Art: 273 The Arts of China; 274 The Arts of Japan; 376 Chinese Painting.

Chinese: 125, 126 Elementary Chinese; 127, 128 Intermediate Chinese; 321, 322 Advanced Chinese; 491, 492 Independent Study.

East Asian Cultures and Languages: 151, 152 Self, State, and Society in East Asia; 231 Literature of China in Translation; 232 Literature of Japan in Translation; 252 Hell on Earth: Chinese Writers on Chinese Society; 271 Japanese Women Through Films and Literature; 332 Money and Society in Japanese Literature; 458 Seminar in Modern Chinese History; 491, 492 Independent Study.

*Economics*: 275 Comparative Economic Systems; 276 Marxian Economics; 493 Senior Seminar (when appropriate).

*Government:* 237 Political Development in Modern Japan; 271 War and Revolution in Vietnam; 358 Contemporary Japanese Politics; 359 Comparative State Systems; 477 Seminar in East Asian Politics.

*History*: 215 America and Asia: Attitudes and Relationships; 216 The Chinese Revolution; 317 The Introduction of Marxism into China; 318 The People's Republic of China.

Japanese: 125, 126 Elementary Japanese; 127, 128 Intermediate Japanese; 321, 322 Advanced Japanese; 421, 422 Fourth-Year Japanese; 491, 492 Independent Study.

Philosophy: 255, 256 Indian Thought; 391, 392 Philosophy Seminar (when appropriate).

*Religious Studies:* 211 Religions of India; 212 Religions of China and Japan; 213 Contemporary Asian Ideas and Values; 218 Buddhist Literature in Asia; 255 The Goddess; 391, 392 Seminar (when appropriate).

151, 152 Self, State, and Society in East Asia An introduction to the society and culture of East Asia, focusing on the elite and popular culture of the region as personified by the great historical personalities of China and Japan. Topics in the history, philosophy, religion, language, literature, and government of the area. *Four credit hours*. MR. FEIGON AND MR. GANZA

[231] Literature of China in Translation A critical examination of the literature of China through the study of myth, fiction, drama, poetry, and essays in translation, focusing on seminal masterpieces in both popular and classical traditions, seeking to discern what is unique and what is shared in both contexts. *Four credit hours*.

**232d1** Literature of Japan A study of Japanese literature in translation, tracing the sources of Japanese literary aesthetics. The works studied extend from the oldest extant mythology to the masterpieces of twentieth-century novelists. Diaries from the medieval period, poems, short stories, and others, cover the years between 712 and 1964. Four credit hours. MS. PRINDLE

**252d1** Hell on Earth: Chinese Writers on Chinese Society A survey of Chinese literature in translation from ancient times to the present, covering poetry and fiction. Three or four credit hours. MR. LO

[271] Japanese Women Through Films and Literature While the visual medium portrays Japanese women in the context of Japanese culture, short stories and other novels will examine them from a literary perspective. The period covered by this course extends from the Heian period (794-1192) to contemporary Japan. Western feministessays will also be incorporated to stimulate discussion. Knowledge of Japanese language is not required. *Four credit hours*.

[332] Money and Society in Japanese Literature An analysis of Japanese novels and short stories (in translation) from the standpoints of Western and Japanese theories on society, culture, and economy. Theoretical works include Heilbroner's The Nature and Logic of Capitalism, Doi's The Anatomy of Dependence, Beasley's Japanese Imperialism, Mitchell's Thought Control in Prewar Japan, Nakane's Japanese Society, Hanami's Labour Relations in Japan Today, and others. Novels and short stories include Saikaku's Japanese Family Storehouse, Kinoshita's Confessions of a Husband, Kobayashi's The Factory Ship, Endô's The Sea and the Poison, Ishinomori's Japan Inc., and others. Four credit hours.

**458** Seminar in Modern Chinese History An examination of the recent Chinese student movement against the background of the history of the People's Republic of China. *Prerequisite:* Permission of the instructor. *Four credit hours*. MR. FEIGON

**491,492** Independent Study Individual study of special problems in East Asian civilization, offered in the departments that participate in the program. *Prerequisite:* Permission of the instructor and the program director. *One to four credit hours*. FACULTY

# Economics

Chair, PROFESSOR HENRY GEMERY

Professors Jan Hogendorn, Gemery, James Meehan, Thomas Tietenberg, Clifford Reid, and Randy Nelson<sup>1</sup>; Assistant Professors David Findlay, Patrice Franko-Jones<sup>2</sup>, John Santos, Michael Donihue<sup>3</sup>, and Saranna Robinson<sup>4</sup>; Visiting Assistant Professor David Ross<sup>5</sup>

In addition to dealing with the study of business behavior, consumers, inflation, and unemployment, economic tools find increasing use in other social sciences, with the skills of the economist central to studies of sex and race discrimination, poverty, energy, technology, government behavior, the environment, the population explosion, crime, and other issues of public and private life. The Economics Department provides a wide selection of courses that analyze problems arising in these areas. The major provides an undergraduate an excellent background for employment and graduate work in numerous fields, including economics, business, law, government, and education.

Attention is called to the interdisciplinary minors in quantitative analysis and in public policy, to the honors program (see description under Economics 483), and to related courses such as History 319.

Requirements for the Major in Economics

Economics 133, 134, 223\*, 224\*, 391; Mathematics 119 or 121; either Mathematics 231 or the two-course sequence 381, 382; one of the senior seminars numbered Economics 431, 472, 493, or Public Policy 493; three additional courses (totaling at least nine credit hours) in economics, ofwhich two must be numbered 300 or above (at least one of the 300-level courses must be taken at Colby). The comprehensive examination administered during the senior year must be passed. Administrative Science 311 may be used to satisfy the non-300-level elective requirement. Potential majors are strongly encouraged to take Economics 133 and 134 in their first year. (*Note:* \*To continue in the major, students must receive a grade of C- or better in Economics 223 and 224.)

Students who wish to do graduate work in economics are urged to elect Economics 336, 393, and 431, and additional courses in mathematics, e.g., Mathematics 311, 338, 372.

Seniors may be invited by the department to prepare a thesis in the second term, successful completion and defense of which will result in the degree being awarded "With Honors in Economics."

The point scale for retention of the major applies only to courses in economics and to Mathematics 231, except that Administrative Science 311 will be counted if substituted for a 200-level course in economics in fulfilling the major requirement. No requirement for the major may be taken satisfactory/unsatisfactory.

## Requirements for the Major in Economics-Mathematics

Economics 133, 134, 223, 224, 336, 393, 472; one additional elective economics course numbered 300 or above; Mathematics 124 or 212, 253, 381, 382; two additional elective mathematics courses numbered 300 or above. The comprehensive examination administered during the senior year must be passed. Students considering graduate work should also elect Mathematics 311, 372, 338.

The point scale for retention of the economics-mathematics major applies to all courses offered toward the major. No requirement for the major may be taken satisfactory/unsatisfactory.

### **Requirements for the Minor in Economics**

Economics 133, 134, 223, 224, and two elective courses in economics totaling at least six credit hours of which at least three credit hours must be at the 300 level or higher. No requirement for the minor may be taken satisfactory/unsatisfactory.

<sup>1</sup>Joint appointment in administrative science and economics.

<sup>2</sup>Joint appointment in economics and international studies.

<sup>3</sup>On leave second semester.

<sup>4</sup>On leave full year.

<sup>5</sup>Part-time.

**133d Principles of Microeconomics** Principles of microeconomics and their applications to price determination, industrial structure, poverty and discrimination, and public policy. *Four credit hours*. FACULTY

134d, 134j Principles of Macroeconomics Principles of macroeconomics and their applications: national product and income accounting, monetary and fiscal policy, inflation, unemployment, and growth. Four credit hours. FACULTY

**213j** The Brazilian Economy: An Economic Laboratory Experience The course will examine on site the range of economic problems facing Brazil: inequality, trade, labor, macroeconomics, and the economic contrast between the rich industrial and agricultural south and the backward agricultural region of the north. Fees for the trip to be announced. Enrollment limited. *Prerequisite:* Permission of the instructor. *Three credit hours*. MS. FRANKO-JONES

214 Latin-American Issues Three or four credit hours MS. FRANKO-JONES

[217, 218] Seminars: Economic Analysis and Policy The methods of economic analysis studied in Economics 133, 134 will be applied to various matters of current economic policy. *Prerequisite:* Economics 133 and/or 134 depending on offering. *Three or four credit hours*.

**223d Microeconomic Theory** The theory of the pricing, distribution, and allocation of resources in a market economy. Emphasis will be placed on the various meanings of economic efficiency. *Prerequisite:* Economics 133, 134. *Four credit hours*. MR. MEEHAN AND MR. REID

**224d Macroeconomic Theory** Analysis of the theories of national income determination, the factors affecting employment, and the price level. Emphasis is placed on the choice of fiscal and monetary policies and current issues in the conduct of stabilization policy. *Prerequisite:* Economics 223. *Four credit hours*. MR. FINDLAY AND MR. SANTOS

231 Environmental and Natural Resource Economics An introductory survey course using economic analysis to explain the underlying behavioral causes of environmental and natural resource problems and to evaluate the policy responses to them. Topics covered include air and water pollution, toxic substances, the allocation of exhaustible mineral resources, and the inevitability and desirability of limiting economic growth. *Prerequisite:* Economics 133. *Three or four credit hours*. MR. TIETENBERG

**254d1** Women in the Labor Market An examination of the past, present, and future economic status of women. Topics include the implications of changing economic and social roles of women for the division of labor in the family; the allocation of time of husband and wife between the household and the labor market; the impact of rising female labor force participation on marriage, childbearing, and divorce; and economic explanations of sex differences in earnings and occupation, including the role of labor market discrimination in observed sex differences in market outcomes. *Prerequisite:* Economics 133. *Three or four credit hours*. MR. SANTOS

[272] European Economic History The framework of economic analysis applied to European historical patterns and trends. Aspects of industrialization, capital accumulation, technological change, trade and migration, and effects of entrepreneurial and governmental decisions. *Prerequisite:* Economics 133, 134. *Three credit hours*.

274 American Economic History The framework of economic analysis applied to American historical patterns and trends. Aspects of industrialization, capital accumulation, technological change, trade and migration, and effects of entrepreneurial and governmental decisions. *Prerequisite*: Economics 133, 134. *Three or four credit hours*. MR. GEMERY

**†[275]** Comparative Economic Systems Examination of alternative ways to organize and operate various sectors of an economy, including agriculture and industry, by comparing the historical experiences of nations around the world. Special emphasis on countries not usually considered in traditional microeconomic and macroeconomic courses. *Prerequisite:* Economics 133, 134. *Three or four credit hours*.

[276] Marxian Economics Basic theoretical concepts of Marxian economic theory dialectical materialism, the labor theory of value and class analysis—will be examined and contrasted with those of orthodox neoclassical economics. Consideration of such issues as poverty, income distribution, the business cycle, and underdevelopment; focus on the implicit value systems inherent in both Marxian and neoclassical economics. *Prerequisite:* Economics 133, 134. *Three credit hours*.

277 International Finance An analysis of international monetary relations. Topics include foreign exchange markets, the history of foreign exchange regimes, capital flows, the balance of payments, adjustment to balance of payments disequilibrium, international monetary organizations, monetary reform, and macroeconomic policy coordination. *Prerequisite:* Economics 133, 134. *Three or four credit hours*. MS. FRANKO-JONES

278 International Trade An analysis of international trade. Topics include theories of

international trade, the gains from trade, the impact upon factor incomes, commercial policy, commodity agreements and cartels, and international trade organizations. *Prerequisite:* Economics 133, 134. *Three or four credit hours*. MR. HOGENDORN

**293** Economic Development The developing areas and their prospects for economic betterment. Analysis of the techniques involved and the problems to be encountered in the growth process. *Prerequisite:* Economics 133, 134. *Three or four credit hours*. MR. HOGENDORN

**312 Topics in Law and Economics** A seminar examining the common law and the legal system from the point of view of economic theory. The focus is on the effect of the legal system on allocation of resources, both as a substitute for and a complement to the market system. Specific topics to be examined include: the definition and allocation of property rights, the assignment of liability for accidents and defective products, and the role of damage remedies for breach of contract. Research paper required; may be done for fourth credit or as Economics 391. Enrollment limited. *Prerequisite:* Economics 223. *Three or four credit hours*. MR. TIETENBERG

[317] Economic Analysis and Policy An examination of current and past macroeconomic events and policies. Topics will range from the economic effects of budget deficits to the desirability of monetary policy rules. Emphasis will be placed on both theoretical and empirical analysis. *Prerequisite:* Economics 224; a statistics course is strongly advised. *Three credit hours*.

**331** Industrial Organization and Antitrust Economics An examination of the structure, conduct, and performance of American industries to determine if the market process efficiently allocates resources to meet consumer demand. An economic analysis of the antitrust laws and an evaluation of their performances. Reference will be made to specific industries and cases. *Prerequisite:* Economics 223. *Three or four credit hours*. MR. MEEHAN

**332 Regulated Industries** An examination of specific regulated markets and the rationale for regulation in each. The economic effects of regulation on price, cost of production, and quality of product or service will be explored. The success of regulation will be evaluated relative to the market outcome that would be expected in the absence of regulation. Research paper required; may be done for fourth credit or as Economics 391. *Prerequisite:* Economics 223. *Three or four credit hours*. MR. MEEHAN

**336d1 Mathematical Economics** A course in advanced economic theory designed to provide students with the fundamental mathematical tools necessary to prepare for graduate work in economics or business administration, and for professional careers in the public or private sector. Topics include the development of portions of consumer and producer theory, the study of static and dynamic models, linear programming techniques, matrix algebra, and the consideration of general equilibrium analysis. *Prerequisite:* Economics 223 and 224 and Mathematics 122 or 124. *Three or four credit hours*. MR. ROSS

**338d1** Money, Banking, and Monetary Policy An examination of the monetary system of the United States. Topics include the determination and role of interest rates, the organization and operation of the banking firm, innovations and regulations of the banking industry, and the implementation and evaluation of monetary policies. Research paper required; may be done for fourth credit or as Economics 391. *Prerequisite:* Economics 224 and Mathematics 231. *Three or four credit hours*. MR. FINDLAY

351d2 Public Finance The economic role of government in the United States economy. The course has three parts: an analysis of market failure, an examination of government social

insurance and welfare programs, and an investigation of the federal tax system. *Prerequisite:* Economics 223. Three or four credit hours. MR. REID

**355** Labor Market Economics Wage determination and allocation of human resources in union and nonunion labor markets. Theories of labor supply, labor demand, and human capital investment; related public policy issues, such as minimum wage laws, income maintenance, and discrimination. The operation of labor markets in the macroeconomy, with particular emphasis on the role of implicit and explicit labor contracts in explaining aggregate wage stickiness, inflation, and unemployment. *Prerequisite:* Economics 233, 234. *Three or four credit hours*. MR. SANTOS

**373d2** Open-Economy Macroeconomics An examination of price level and income determination in an open economy, the choice of exchange rate regime and its impacts on macroeconomic stability, the problems of designing and implementing monetary and fiscal policy in an open economy, and the debate over the desirability of international coordination of macroeconomic policies. Emphasis will be on application of theoretical concepts to analyze recent historical and current events. *Prerequisite:* Economics 224. *Four credit hours.* MR. FINDLAY

**391d** Analytical Research Paper in Economics An analytical, not descriptive, research paper in economics, to be coordinated with an elective economics course numbered above 250 in which the student is concurrently, or has previously been, enrolled. Required of all economics majors. *Prerequisite:* Permission of the instructor. *Two credit hours*. FACULTY

**393d Econometrics** The use of statistical techniques to estimate and test economic models. Topics include multiple regression, multicollinearity, specification tests, serial correlation, heteroscedasticity, and the simultaneous-equations approach. Research paper required; may be done for fourth credit or as Economics 391. *Prerequisite:* Economics 223 or 224, Mathematics 231 or 382. *Three or four credit hours*. MR. REID AND MR. ROSS

431 History of Economic Thought An examination and appraisal of the development of economic theory. Major writing from the mercantilist period through the Keynesian period is included. Extensive use of source material. Enrollment limited. *Prerequisite:* Economics 223, 224, and senior standing. *Three or four credit hours*. MR. GEMERY

[472] Senior Seminar in Mathematical Economics An independent project on a topic of the student's choice, including critical reading of topical articles, and focusing on the preparation and mathematical analysis of a pertinent economic model. *Prerequisite:* Economics 336 and senior standing as an economics or economics-mathematics major. *Three credit hours*.

**483, 484** Independent Honors Project The culminating study for the year-long honors project for senior majors in economics and economics-mathematics; the completed research to be presented in both written and oral format. *Prerequisite*: Permission of the department. *Three credit hours*. FACULTY

**491, 492** Independent Study Independent study devoted to a topic chosen by the student with the approval of the department. *Prerequisite*: Senior standing as economics major. *One to four credit hours*. FACULTY

**493d** Senior Seminar Topics in public policy analysis, interdisciplinary issues, or research. Topics will change each semester; a complete description will be available from the department before registration. In 1991–92: The Colby Economic Outlook, Public Policy (listed as Public Policy 493), The Economics of Organization, and Human Capital and Development. Enrollment limited. *Prerequisite*: Senior standing as an economics major or permission of the instructor. *Four credit hours*. FACULTY

## Education

#### Co-Directors, Assistant professors Lyn Brown and Mark Tappan

Professor Yeager Hudson; Associate Professors Marilyn Mavrinac<sup>1, 2</sup>, Robert Kany, Jean Sanborn, and Dorin Zohner; Assistant Professors Brown and Tappan; Visiting Assistant Professor Peter Kahn<sup>1</sup>, Visiting Instructor Karen Kusiak

The Education Program provides students with an opportunity to learn about educational theory and practice in our society, seeking to inform them about a range of issues related to schooling. The interdisciplinary minor offers students a liberal arts introduction to the history, philosophy, and knowledge of children and the learning process. It provides students with preparation for graduate schools of education.

The interdisciplinary education minor also provides the opportunity to able and motivated students to qualify for careers and employment in public and private schools. The best preparation for teaching is two-fold: (a) a strong background in liberal arts, including intensive study of the subject to be taught by means of a strong major in that subject, and (b) appropriate teacher education courses and practica.

Practical teaching experience with learners in schools is a major strength of Colby's Education Program. Practica are the laboratory component and are available at the elementary, middle, and junior high school. Student teaching at the junior high and high school level is available for qualified seniors.

Two options exist, sharing a common base of courses, the "open" minor, and the "certification" minor. The "open" minor allows a liberal arts exploration of educational theories and practices and begins preparation for graduate programs which certify in early childhood, special subjects, elementary, and special education. Colby does not offer certification in these subjects, nor in business education, art, or music.

Colby's "certification" minor is approved by the Department of Education of the State of Maine under the standards of the Interstate Certification Project. The Maine secondary school certificate is honored in many other states. This minor allows students to qualify for public and private secondary school teaching certificates in English, social studies, sciences, mathematics, and modern foreign languages.

In addition to completing Colby's certification program, candidates for the Maine secondary certificate must perform with satisfaction on the "core battery" of the National Teacher Examinations. To receive recommendation from Colby, candidates must also have demonstrated commitment to teacher preparation, solid academic performance, and excellent teaching performance in the practica and senior student teaching. No requirement for the certificate may be taken satisfactory/unsatisfactory. Students who plan to teach in public and private schoolshould elect the education minor and consult with the Education Program faculty as early as possible.

Careful planning of the student's course of studies is essential. Counseling for undergraduate programs and careers in education is available through the Education Program faculty. This early consultation is especially important for students wishing to spend a semester or a year abroad.

Required Program of Studies for the Open Minor (without Certification)

(1) Any major. However, only students with sufficient background in commonly taught high school subjects may elect the senior student teaching sequence, Education, 433, 435j, and 493.

(2) Education 231, 258, either 351j or 353 or 355j, 434, and any three other education courses. Students may repeat the pre-student teaching practica, Education 351j, 353, 355j. Qualified students may also take the student teaching courses, if they plan to select the full three course sequence.

Required Program of Studies for Secondary Certification Minor (grades 7-12) (1) A major in the subject to be taught. Requirements vary from one subject to another. Additional courses may be required other than those in the major. Early consultation with the Education Program faculty is important.

(2) Education 231, 258, 399, 433, 434, 435j, 493, and one pre-student practicum (351j, 353, or 355j). When a course in "mainstreaming exceptional children in the classroom" becomes available, that course will be required for the Maine certification. The availability of Education 399 methods courses varies from year to year.

<sup>1</sup>Part-time.

<sup>2</sup>Joint appointment in education and history.

[213d] School and Society What is the role of the school in society? Using a case study method the course examines the interaction between schools and their social contexts. Three credit hours.

**215** Adolescents in Schools and Society A focus on understanding the experiences of contemporary adolescents, using case materials, literature, film, and autobiographical reflection to capture voices of adolescents coming of age. The ways in which theories and approaches from various disciplines help in interpreting the phenomena of adolescence. Consideration of gender, racial, class, and cultural differences, and the crises posed by the reality of diversity. *Four credit hours*. MS. BROWN AND MR. TAPPAN

**231d** The Craft of Teaching What knowledge is of most importance? How should such knowledge be organized and taught? How is student achievement measured and evaluated? The general principles of curriculum planning and instruction, including the use of media and materials. Emphasis is on the scientific basis of the art of teaching. Each student will design a curriculum unit in a commonly taught elementary or secondary school subject. Directed participant-observer exercises in area elementary and/or secondary schools. *Four credit hours*. MR. TAPPAN AND MS. KUSIAK

**258 Educational Psychology** Listed as Psychology 258 (q.v.). Prerequisite: Psychology 121. Four credit hours. MR. ZOHNER

**271** Environmental Science and Values Technological advances often lead to harmful and potentially devastating environmental problems, locally and globally, including such problems as toxic and nuclear wastes, ozone depletion, acid rain, and oil spills. An interdisciplinary course using theory, research, and practice to consider the challenge of improving children's environmental science and values education and of enhancing their awareness of environmental problems and their care and concern for the natural world. *Three credit hours*. MR. KAHN

**332** Women, Girls, and the Culture of Education Beginning with the developmental needs and desires of girls, the course provides the groundwork for a gender-sensitive approach to education, linking girls' intellectual, emotional, and identity development to recurrent themes and problems in the education of girls and women: issues of voice, relationship, authority, and power. Readings include the work of Carol Gilligan, Jane Roland Martin,

Madeline Grumet, bell hooks, Adrienne Rich, and others. The relationship of women and men educators to the next generation of women, considering questions of class, race, and ethnicity. *Four credit hours*. MS. BROWN

**336** History of Education: American Schools Schools and colleges since the 1840s, with attention to literacy goals and the training of adolescent elites. Relations among populists, bureaucrats, and reformers are examined in essay and team reports. Investigations of regional, race/ethnicity, and gender differences. Four credit hours. MS. MAVRINAC

**351j Pre-Student Teaching Practicum** The student will serve as an assistant teacher in an elementary or junior high school. Each student will prepare lesson plans and write critical essays evaluating assigned readings. Meeting weekly in seminar with college supervisor. Nongraded. *Prerequisite*: Permission of the instructor. *Three credit hours*. MS. MAVRINAC

**353 Pre-Student Teaching Practicum** The student will serve as an assistant teacher in an elementary or junior high school. Each student will prepare lesson plans and write critical essays evaluating assigned readings. Meeting weekly in seminar with college supervisor. Nongraded. *Prerequisite*: Permission of the instructor. *Three credit hours*. MS. MAVRINAC

[354] The Teacher and Curriculum Change What is the role of the teacher in the 1990s and how are teaching practices a reflection of a particular vision of society? This course will examine the theoretical and historical underpinnings of several curriculum movements, their influences on teaching practices, and their positioning within current educational reform. Three credit hours.

**355j** Urban Practicum The student will serve as an assistant teacher in an elementary or middle school in an inner city environment. Each student will tutor, and later present several lesson plans to the whole class. Four critical essays comparing assigned readings with classroom experiences are required. All students will meet weekly as a group with a local adviser or instructor. Nongraded. *Prerequisite:* Permission of the instructor. *Three credit hours*. MS. MAVRINAC

**399** Subject Matter Methodology Methodology of teaching the particular subject matter area. Listed as English 399, Foreign Languages 399, Natural Science 399, Mathematics 399, and Social Science 399 (q.v.). *Prerequisite:* Education 231. *Two or three credit hours*. FACULTY

**433** Student Teaching Practicum Students will serve as student teachers in a local school, working under the supervision of a cooperating teacher. Emphasis on curriculum planning and instruction. Nongraded. *Prerequisite*: Education 231, 351j or 353 or 355j, and permission of the the instructor and of the academic department and strong recommendation by the major department of at least a 3.0 grade point major average; the major must be a commonly taught secondary school subject for which the Colby Education Program offers certification; concurrent enrollment in Education 493 is required and enrollment in Education 435j is expected. *Four credit hours*. MS. BROWN AND MS. KUSIAK

**434 Philosophy of Education** A study of the teachings concerning education of several major philosophers from Plato to Dewey. Consideration of how thought about issues such as the human nature, our conception of the ideal society, our vision of the good life, and our beliefs about morality affects educational beliefs and practices. *Four credit hours*. MR. HUDSON

435j Student Teaching Practicum Students will serve as student teachers in a secondary

school, helping adolescents to learn and working with cooperating teacher(s) and support personnel. The student teacher is expected to assume full responsibility for teaching three classes daily, including planning and presenting unit and daily lesson plans and testing and evaluating student performance. Nongraded. *Prerequisite*: Education 231, 433, and permission of the academic department and the instructor. *Three credit hours*. MS. KUSIAK

491, 492 Independent Study Independent study of advanced topics and areas of individual interest. Prerequisite: Permission of the instructor. One to four credit hours. FACULTY

**493** Student Teaching Seminar A focused teaching methodology seminar designed to accompany student teaching practicum. Deals with practical issues such as lesson plan preparation, communication and discipline in the classroom, special class projects, and student evaluation. Analysis of teaching through a daily journal and readings. Nongraded. *Corequisite:* Enrollment in Education 433. *Two credit hours*. MS. BROWN AND MS. KUSIAK

# English

Chair, PROFESSOR EDWIN KENNEY; Associate Chair, ASSOCIATE PROFESSOR PATRICIA ONION Professors Douglas Archibald, Eileen Curran<sup>1</sup>, Patrick Brancaccio<sup>2</sup>, Charles Bassett, Howard Koonce, John Mizner, Kenney, John Sweney, Susan Kenney<sup>3</sup>, Ira Sadoff<sup>1, 4</sup>, Dianne Sadoff<sup>1, 4</sup>, Peter Harris, W. Arnold Yasinski<sup>5</sup>, and Richard Russo<sup>3</sup>; Associate Professors Phyllis Mannocchi<sup>6</sup>, Onion<sup>3</sup>, Jean Sanborn<sup>3</sup>, Robert Gillespie<sup>7</sup>, and Natalie Harris<sup>3</sup>; Assistant Professors Linda Tatelbaum<sup>3</sup>, Cedric Bryant, Joylynn Wing<sup>1</sup>, Laurie Osborne, and Russell Potter; Visiting Assistant Professors James Boylan<sup>3</sup> and Mary Ruefle; Visiting Adjunct Assistant Professor David Mills

The English Department offers literature courses in all periods, genres, and major authors, as well as seminars in particular topics and broad literary and historical issues. The major in English builds upon the close reading and detailed analysis of literary texts; the investigation of the central political, cultural, and ideological issues occasioned by those texts, particularly issues of race, gender, and class; and the consideration of various critical approaches, methods of inquiry, and strategies of interpretation. There is a creative writing program in both fiction and poetry at the introductory, intermediate, and advanced levels. However, there is heavy enrollment pressure in these courses, and acceptance into the program is limited. The department also offers special-topic courses and supervises about 50 independent-study projects each year. Committed to interdisciplinary studies, the department encourages team-taught courses with colleagues in other departments. English is one of the most useful majors for those who want to attend professional schools of law, medicine, and business, as well as for those seeking jobs in commerce, industry, and government. Some majors become college or school teachers; some go into related work, such as journalism, library science, or publishing. Students interested in teaching, private and public, are urged to read the education section of the catalogue and to contact a member of the Education Department.

Requirements for the Major in Literature Written in English for the Class of 1992 English 221, 222, 251 and eight courses numbered 300 or higher. English 252 may count as one of the eight. At least four of these must be courses in which the major focus is upon British literature written before 1900 or upon American literature. Students who have not taken 221, 222, and 251 should consult with their advisers and may substitute 271, 272 or an appropriate upper level course for each. English 399 does not count toward the major.

Requirements for the Major in Literature Written in English, Beginning with the Class of 1993

English 172, to be taken during the first year, and 271, 272, to be taken sophomore year; four period and genre courses (311–374); two studies in special subjects (411–429, 497–498); two

additional courses which may be chosen from advanced courses in English or American literature, creative writing, or literature in other languages or in translation; one senior seminar (493). At least three of these courses above the 271-272 level must be courses in which the major focus is upon literature written before 1800 and at least three upon literature written after 1800. All choices of advanced courses should be carefully planned and the major adviser must approve them. English 399 does not count toward the major.

Students who meet the prerequisites, define a project, and secure the support of a tutor may elect to take English 490, the Honors Thesis, and, upon successful completion, graduate with "Honors in English." Consult the chair of the department for more information.

The point scale for retention of the major applies to all English courses that may be used to fulfill major requirements. No requirement for the major may be taken satisfactory/unsatisfactory.

Students planning to continue the study of English in graduate school should confer with their advisers to be sure that they have planned a substantial and adequate curriculum. They should be proficient in at least one foreign language. Most universities require two languages, and some require a classical language as well. Work in classical or foreign literature, history, philosophy, art, music, and some of the social sciences reinforces preparation in the major and enhances one's chances for success in graduate study.

The department encourages interdepartmental and interdisciplinary studies and supports programs in American studies, African-American studies, women's studies, and performing arts. Attention is called to the minor in creative writing described under the specific heading.

Recention is cance to the minor increative writing described under the specific heading.

<sup>1</sup>On leave full year. <sup>2</sup>On leave second semester. <sup>3</sup>Part-time. <sup>4</sup>Shared position. <sup>5</sup>Administrative vice president. <sup>6</sup>On leave first semester. <sup>7</sup>College editor.

111 Expository Writing Workshop For students for whom English is a second language. Intensive practice in composing in English with some attention to the requirements of the academic essay. Work on syntax and grammar only as needed. Nongraded. Three credit hours. MS. SANBORN

**112d Expository Writing Workshop** For native speakers with particular writing difficulties. Taken in conjunction with English 115 or with a writing-emphasis course in another department. Meets as individual tutorial. Nongraded. *One credit hour*. MS. SANBORN

115d, 115j English Composition Frequent practice in expository writing to foster clarity of organization and expression in the development of ideas. The assigned reading will vary from section to section, but all sections will discuss student writing. Required for first-year students. Students with an Advanced Placement score of 4 or 5 are exempted. Four credit hours (three credit hours in January). FACULTY

172d, 172j Introduction to Literature "What is literature?" or "When is it literature?" A focus on the students' encounter with the text, the words on the page. Examples of poetry, prose, and drama written in English, from different times and cultures; and work toward developing a basic critical vocabulary for understanding and discussing these different forms of literature. Frequent practice in careful critical writing. Required for English majors; should be taken during the first year. Four credit hours; three credit hours in January. FACULTY

**214** Tutoring Writing The class will discuss readings on the process of writing and methods of tutoring. Theory will be combined with practice in peer review of student papers, mock tutorials, and actual supervised tutorials. Students completing the course will have the opportunity to apply for work-study positions in the Writers' Center. Enrollment limited. Nongraded. *Prerequisite:* Sign up with the instructor in Writers' Center. *Two credit hours*. INSTRUCTOR

[216] Expository Writing Workshops Workshops for students wishing to improve their ability to write on topics studied in other courses. Student papers will be presented for workshop criticism so that they may be revised. Focus on problems of stylistic consistency and force. May be repeated for additional credit. *Prerequisite*: English 115. *Four credit hours*.

271d Introduction to the Interpretation of Literature in English: Critical Theory The study of selected texts, through close reading and detailed analysis, and the consideration of various critical approaches, methods of inquiry, and strategies of interpretation. English majors should take this course in the sophomore year. Four credit hours. FACULTY

272d Introduction to the Interpretation of Literature in English: Historical Contexts Investigation of some of the central political, cultural, and ideological issues occasioned by literary texts, particularly issues of race, gender, and class, through close reading and detailed analysis. English majors should take this course in the sophomore year. Four credit hours. FACULTY

**274d** Voice and Public Speaking A course in the preparation and delivery of effective public speeches. The emphasis is on serious speeches concerning current events and problems. Students are graded on their own presentations and also on criticism of other speakers. Enrollment limited. Formerly listed as Performing Arts 274. Four credit hours. MR. MILLS

278d Creative Writing: Fiction Introduction to the writing of fiction, with emphasis on student manuscripts. Enrollment limited. *Prerequisite*: English 115. *Four credit hours*. FACULTY

279d Creative Writing: Poetry Introduction to the writing of poetry, with emphasis on student manuscripts. Enrollment limited. *Prerequisite*: English 115. *Four credit hours*. FACULTY

**297j** Theater in London The course will concentrate on the variety of theater available on the London Stage, including the subsidized repertory groups, the commercial theater in the West End, and fringe theaters and experimental groups. Students are required to attend at least fifteen productions. *One to three credit hours*. MR. BRANCACCIO

**†[311]** The Middle Ages The development of western European literature in the context of medieval intellectual and cultural history. Major English and continental works from such genres as epic, romance, allegory, and lyric will be studied from a comparative point of view. Four credit hours.

[313] The Renaissance The study of English and continental works from 1485 to 1603. Four credit hours.

[315] The Seventeenth Century The study of English literature from 1603 to 1660. Four credit hours.

**316** The Restoration The prose, poetry, and drama of 1660–1700, with special emphasis on the works of John Dryden. *Four credit hours*. MR. SWENEY

**†[317]** The Eighteenth Century I Selected works by Defoe, Pope, Swift, Fielding, and other writers of the first half of the century. Four credit hours.

**318 The Eighteenth Century II** Selected works by such writers as Johnson, Burke, Goldsmith, Burney, Gray, Radcliffe, Austen, and Blake read in the context of the shift from neoclassical to romantic structure, thought, and sensibility. *Four credit hours*. MR. ARCHIBALD

**\*321d2** The Romantic Period I: The Major Writers Close readings, stressing intellectual and social history, or representative texts by Blake, Wordsworth, Coleridge, Byron, Mary and Percy Shelley, Keats, and Austen. *Four credit hours*. MR. MIZNER

**†[322]** The Romantic Period II: The Romantic Hero Novels of different periods and literatures, in all of which the central characters reveal "romantic" ways of thinking, acting, and feeling: Goethe's Sufferings of Young Werther, Lermontov's A Hero of Our Time, Flaubert's Madame Bovary, Conrad's Lord Jim, Mann's Death in Venice, Fitzgerald's The Great Gatsby, and Hemingway's The Sun Also Rises. Enrollment limited. Four credit hours.

**†**[323] Victorian Literature I Four credit hours.

324d1 Victorian Literature II Four credit hours. MS. SHERLOCK

**325d2** Modern British Fiction Representative British novels of the twentieth century by such writers as Conrad, Ford, Lawrence, Woolf, Forster, Waugh, Greene, and Lessing. *Four credit hours*. MR. KENNEY

[326] Modern British and Irish Poetry The origins, nature, and achievements of modern poetry in Britain and Ireland. Major authors will include Hardy, Eliot, Yeats, Auden, and Heaney. Four credit hours.

**327 The Development of Dramatic Art I** An examination of plays in the Western world from Greece through the Renaissance. The fourth credit hour of this course will focus on the history of theaters and theatrical traditions during these periods. *Three or four credit hours*. MR. KOONCE

**328** The Development of Dramatic Art II A sequel to English 327 from the neoclassic through the modern periods. The fourth credit hour of this course will focus on the history of theaters and theatrical traditions during these periods. *Three or four credit hours*. MR. KOONCE

**331** Studies in Pre-Modern Drama Topics, to be varied, are studied in the context of production problems as well as literary content; participation in a production of a play or scenes from several plays will be required, either by acting or in technical support. May be repeated for additional credit. For 1991: "Playing the Woman in Renaissance Drama." An exploration of the way Renaissance drama (other than Shakespeare) stages women and the place of women within the predominantly patriarchal system of the Renaissance theater; not just the ways the Renaissance stages sexual differences but also what the female roles then have to offer a contemporary company including female actresses. Also listed as Performing Arts 254, 354, 454. *Four credit hours*. MS. OSBORNE

**†[332]** Studies in Modern Drama Topics in this course will vary. May be repeated for additional credit. Three or four credit hours.

[333j] Modern American Drama This course will emphasize the European influences on

the major American playwrights from 1920 to 1960. Particular attention will be given to the influence of Strindberg on writers such as O'Neill, Williams, and Albee. Three credit hours.

334d1 Contemporary American Drama Three or four credit hours. MS. WING

[335] Studies in the Novel Versions of the self. A study of the ways in which changing ideas of self are reflected in and affect the form of the novels of such writers as Defoe, Austen, Dickens, Lawrence, Woolf, Faulkner, and Lessing. *Four credit hours*.

[337] Studies in Poetry Four credit hours.

[338] The American Renaissance I: Hawthorne and Melville A close study of the major works of these writers in the context of their times. Particular attention to the influences of popular culture and such movements as anti-slavery, women's rights, and prison reform. Four credit hours.

**\*339** The American Renaissance II A close reading of the major works of Emerson, Thoreau, Margaret Fuller, Walt Whitman, and Emily Dickinson with emphasis on the transcendentalists' search for heightened consciousness and the connections between poetic and scientific truth. Four credit hours. MR. BRANCACCIO

**\*341d2** American Realism and Naturalism Major works by Twain, Howells, James, Crane, Dreiser, and others in the context of American and European traditions of the novel and critical theories of the art and purpose of fiction in American culture. *Four credit hours*. MR. BASSETT

**343** African-American Literature Particular attention to the much neglected contributions of African-American women writers such as Jessie Fauset, Nella Larson, and Zora Neale Hurston. The aim of the course, more broadly, is a critical understanding of the ways African-American writers in the nineteenth and twentieth centuries have artistically responded to problems inherent in American democracy concerning race, identity, marginality, gender, and class. The interpretive methods which will inform readings by James Baldwin, Toni Morrison, Paul Lawrence Dunbar, and Chester Himes, include formalism, historicism, feminist criticism, and myth criticism. *Four credit hours*. MR. BRYANT

[345] Modern American Fiction A non-canonical, pluralistic approach to modern American fiction which emphasizes the cultural and ethnic heterogeneity of the American literary experience in the twentieth century—rather than the patriarchal view of it as a "main stream." Topics, issues, and writers of primary concern include exploring the interrelationships between the "Lost Generation" writers and the Harlem Renaissance artists working during the same time: progressivism; existentialism; modernism; and writers including Fitzgerald, Brooks, Faulkner, Hurston, O'Connor, Wright, Wolfe, Fauset, Eliot, Anderson, and Baldwin. *Four credit hours*.

**347d2** Modern American Poetry Engagement with poems by Robert Frost, H. D., Claude McKay, Ezra Pound, William Carlos Williams, and others in literary, historical, and cultural context. *Four credit hours*. MR. YASINSKI

†[349] Contemporary American Fiction Four credit hours.

351j Contemporary American Poetry A range of significant poets from the 1950s to the

present; considering major figures—Robert Lowell, Elizabeth Bishop, James Wright, Alan Ginsberg, Adrienne Rich—as well as younger poets just now in their prime. *Three credit hours*. MR. HARRIS

\*353 The American Short Story A study of the genre that many analysts consider the most consistently successful in American literature—the short story. Distinguished and popular writers of short narratives will make up the syllabus, from Washington Irving to Ann Beattie, with extended emphasis on such geniuses as Poe, Hawthorne, James, Hemingway, Wright, and O'Connor. Four credit hours. MR. BASSETT

**355j, 355d2, 356d** Studies in American Literary History Not a survey, these courses look toward establishing relationships among the historical American contexts in which literary works were produced, examining these works as imaginative artifacts, tracing the impact of these works on the social and cultural elements of the America of their time, and seeking the significance of the works for readers in later and different worlds. 355: Puritans to the Civil War. 356: Civil War to the present. For enrollment in both 355 and 356, preference will be given to American Studies majors. *Four credit hours (three credit hours in January)*. FACULTY

**374** The Female Experience in America Listed as American Studies 374 (q.v.). Enrollment limited. Four credit hours. MS. MANNOCCHI

**378** Intermediate Fiction Workshop Practice in the writing of short stories, with major emphasis on student manuscripts. *Prerequisite:* English 278 or permission of the instructor. *Four credit hours*. MR. RUSSO

**379d** Intermediate Poetry Workshop Practice in the writing of poetry, with major emphasis on student manuscripts. *Prerequisite*: English 279 or permission of the instructor. *Four credit hours*. MS. RUEFLE

**399 Teaching Writing and Reading** Theory and practice in teaching writing, close reading, and grammar, and in methods of class discussion and testing. Open to students in any major, whether or not pursuing the education program. May not be counted toward the major in English. Nongraded. *Three credit hours*. MS. SANBORN

**411j** Shakespeare on Film An examination of four major Shakespearean texts in conjunction with two or three film versions of each. Close attention to the strategies of film editing and recent film theory in the context of Shakespearean films and their uses of the text. Assignments include film analysis as well as literary approaches to the plays. *Three credit hours*. MS. OSBORNE

**412** Shakespeare in Performance A close examination of Shakespearean plays from a variety of genres in terms of their internal representations of theater and the theatrical challenges they pose. Concerns include Renaissance theatrical practice in contrast with current theatrical practice, current analyses of Shakespeare in performance theory, and the connections between text and performance. Also listed as Performing Arts 254, 354, 454. Four credit hours. MS. OSBORNE

**413, 413j** Authors Courses Courses focusing on the works of one or two authors. Topics for 1991–92 include the Chaucerian Text and Its Histories, Milton, Joyce, and Faulkner. Four credit hours; three credit hours in January. FACULTY

\*415 The Political History of the English Language The course links an examination of

changes in the form and vocabulary of English with a history of nationalism, gender, class, and power relations in general, using both historical and philological evidence, beginning with Old English texts, moving through the centuries, and concluding with an examination of English as a language of colonization in Africa, Asia, and the Americas. Consideration of questions of orality, literacy, and the current explosion of language in talk shows, rap music, and electronic communications. *Four credit hours*. MR. POTTER

†[417] Literary Criticism A study of contemporary theories of interpreting literature, including New Criticism, structuralism and semiotics, psychoanalysis, Marxism, reader response, and poststructuralism. How readers interpret literature, what values are assumed, and what operations are subconsciously applied to texts. The central literary text used is Conrad's *Heart of Darkness. Four credit hours*.

[419] African Prose Fiction and autobiography dealing with such themes as African traditional culture and the coming of colonialism, the struggle for independence and the problems of development, and the reactions of Africans to the United States. Readings will be restricted to the works of authors writing in English, such as Chinua Achebe, Ezekiel Mphalele, Peter Abrahams, James Ngugi, Stamlake Sankange, and Bessie Head. *Four credit hours*.

[421] The Literature of Existentialism Though emphasizing novels and plays of Sartre and Camus, this course also includes works by Dostoevsky, Tolstoy, Melville, Conrad, Beckett, Ionesco, Pinter, Abe, and Percy. Students are encouraged to participate in some capacity in the production of one of the plays studied. *Four credit hours*.

[425] Modern Women's Literature Classics of modern women's literature, written in English between the turn-of-the-century and the 1960s. Among the works to be studied are short stories, novels, poetry, essays, a play, and an autobiography by women writers from England, the United States, Africa, India, and Australia. Excerpts from classics in feminist literary theory and psychobiography are included in order to establish a frame of reference for the readings, and analysis will incorporate differences of race, class, culture, and sexuality. *Four credit hours*.

†[427] The Harlem Renaissance An examination of historicism and reader-response models of reading as ways of exploring three genres—poetry, short fiction, and the novel—which African-American writers exploited in unprecedented ways during the 1920s. Critical reading of African-American literature in context of race, the art versus propaganda controversy, democratic idealism, politics, and the patronage dilemma which shaped both black art and the cross-cultural relationships between white and black artists. A particular effort will be made to amplify those black voices—including Nella Larson, Jessie Fauset, Rudolph Fisher, and Wallace Thurman—still marginalized by the privileged status of canonical white and black male authors. *Four credit hours*.

**429d2 Passionate Expression: Love, Sex, and Sexuality in Western Literature** A study of the Western tradition in love literature focusing on representative masterworks both from "mainstream" culture and from counter-cultures through the ages; topics begin with the Bible, Greek drama, and medieval lyric and conclude with classic Hollywood versions of love stories and the fiction of contemporary liberation movements. *Four credit hours*. MS. MANNOCCHI

478d1 Advanced Fiction Workshop Practice in the writing of short stories and longer fiction, with major emphasis on student manuscripts. May be repeated once for additional credit. *Prerequisite:* English 378 or permission of the instructor. *Four credit hours*. MS. KENNEY

**479** Advanced Poetry Workshop Practice in the writing of poetry, with major emphasis on student manuscripts. May be repeated once for additional credit. *Prerequisite:* English 379 or permission of the instructor. *Four credit hours*. MS. RUEFLE

**490** Honors Thesis Arranged in consultation with the major adviser. Prerequisite: Permission of the department honors committee. Four credit hours. FACULTY

**491, 492** Independent Study Individual projects exploring topics for which the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of a project adviser and the chair of the department. *One tof our credit hours*. FACULTY

**493d, 493j** Seminars Topics for 1991–92 include The Confessional Novel, the Harlem Renaissance, the Continuity of Indian American Literature, and Gendered Bodies: Corporeal Knowledge in Western Culture. *Four credit hours; three credit hours in January.* FACULTY

**497** The Holocaust: History, Literature, Film An interdisciplinary examination of the Holocaust; of its genesis in anti-Semitism and European racism; and of its effects on survivors and their children. The course confronts some of the moral problems the event poses: crimes of obedience; Jewish complicity; the Allied response; the "innocent" bystander. Four credit hours. MR. MIZNER

**498 Devotional Works** Poetry and prose which constitute acts of piety; a variety of texts dealing with faith, paying special attention to saints and mystics. Poets include Hopkins, Crashaw, Traherne, Donne, Kabir, Rumi, St. John of the Cross; prose texts may include *The Life of Milarepa, Interior Castle* by Teresa of Avila, *The Way of the Pilgrim, Franny and Zooey* by Salinger, *The Temptation of St. Anthony* by Flaubert, The Book of Job, and the short story "St. Emmanuel the Good, Martyr" by Miguel de Unamuno. *Four credit hours*. MS. RUEFLE

# **Environmental Studies**

Director, PROFESSOR DAVID FIRMAGE

ADVISORY COMMITTEE: Professors F. Russell Cole and Firmage (Biology), James Fleming (Science and Technology Studies), Whitney King (Chemistry), Robert Nelson (Geology), and Thomas Tietenberg (Economics)

The environmental studies minor is designed to introduce students to environmental issues and their ramifications in the context of both the social and natural sciences. Course requirements provide for flexibility, allowing students to study in areas of most interest to them.

## Requirements for the Minor in Environmental Studies

(1) Environmental Studies 118 and 493;

(2) either Economics 133 and 231 or Anthropology 112 and 252;

(3) either Biology 161 and 271 or Geology 141 and 351 or Chemistry 141 and 142 (Chemistry 217 is recommended for students electing the latter option);

(4) One course selected from: Administrative Science 251; Anthropology 211; Biology 258j, 352, 354, 358j; Chemistry 217; Economics 293; History 233, 234, 319; Philosophy 211; Science -Technology Studies 215.

No requirement for the minor may be taken satisfactory/unsatisfactory.

Also available are environmental science concentrations in biology and chemistry majors and an environmental science option in the geology major. These are interdisciplinary programs intended to prepare students for entry level positions in firms or government agencies concerned with environmental issues, for graduate study, or for roles as educated citizens in a world increasingly confronted with environmental problems. Students are encouraged to participate in relevant field study or internships to complement their academic work. Requirements are listed in the appropriate departmental section.

A student cannot elect both the environmental studies minor and an environmental science concentration or option.

118 Environment and Society An interdisciplinary seminar focusing on the human relationship with an impact on the environment. A look at some of the environmental problems which have arisen as a result of the growth of society in various areas of the world. The causes of each problem, methods for investigating the problem, and possible solutions will be investigated from a scientific and a public policy perspective. Lecture and discussion. *Four credit hours*. FACULTY

**215** Atmospheric Science Listed as Science-Technology Studies 215 (q.v.). Formerly listed as Environmental Science 113. *Three or four credit hours*. MR. FLEMING

[217] Environmental Chemistry Listed as Chemistry 217 (q.v.). Prerequisite: Chemistry 142. Lecture only: three credit hours; lecture and laboratory: four credit hours.

**231** Environmental and Natural Resource Economics Listed as Economics 231 (q.v.). Prerequisite: Economics 133. Three or four credit hours. MR. TIETENBERG

**493** Environmental Studies Colloquium Focused upon student-defined, small-group, environmental research projects, this seminar will involve periodic oral presentations by all participants and a major, original, written research report from each group. Discussions and guest presentations will emphasize interdisciplinary solutions to environmental problems. *Prerequisite:* Completion of all other requirements in the environmental studies minor or permission of the instructor. *Three credit hours*. FACULTY

# Field Experience, Internship

-95, -95j, -96 Field Experience or Internship Noncurricular experience with direct, demonstrated relationship to the student's curricular program. Credits earned in field experience or internship may be applied toward requirements for a major only with explicit approval of the chair of the major department or program. Nongraded, credit or no entry. Credit may not exceed three hours in any semester, January, or summer session without advance approval by the Educational Policy Committee, except for approved programs such as Colby in Washington. *Prerequisite*: A formal proposal filed with the field experience coordinator prior to beginning of the project. Proposals for January program credit must be submitted by December 1. Proposals for summer credit must be submitted by May 1. One to three credit hours (zero to three credit hours in January).

# French

In the Department of Romance Languages and Literatures. Unless otherwise specified, all courses are conducted in French. French 135 or permission of the instructor is required for all courses numbered 200 or higher.

Professors Guy Filosof, Jonathan Weiss, Jane Moss, and Arthur Greenspan<sup>1</sup>; Associate Professors

Charles Ferguson and Suellen Diaconoff<sup>2</sup>; Assistant Professor Adrianna Paliyenko; Visiting Assistant Professor Abbes Maazaoui; Instructor Dace Weiss<sup>3</sup>; Visiting Instructors Francis Bright and Nancy Meader<sup>4</sup>

Achievement Test: If a student offers a foreign language for entrance credit and wishes to continue it in college, that student must either have taken the College Board achievement test in the language or take the placement test during orientation.

**Requirements for the Major in French** Potential French majors should consult with members of the department during orientation to determine the appropriate sequence of courses.

French majors are normally required to take French 221, 222, 231, and at least six additional courses in language or literature numbered above 231 (not counting French 234). At least two of these courses must focus on French literature written before 1800.

The following statements also apply:

(1) The point scale for retention of the major is based on all French courses numbered above 127.

(2) No major requirements may be taken satisfactory/unsatisfactory.

(3) No more than the equivalent of four semester courses of transfer credit may be counted toward the major.

(4) All majors in the department must take at least one course in the major approved by the major adviser each semester until graduation. For students returning from foreign study, these courses must be numbered 300 or higher.

(5) No more than one French literature course given in English may be counted toward the major.

(6) An exemption or waiver from a required course must always be confirmed in writing, but in no event does the waived course reduce the number of required courses for the major, nor does it carry any hour credit toward either the major or graduation requirements.

Majors in French are encouraged to complement the major through exploration of courses in French and European history, art, government, philosophy, performing arts, and women's studies.

Students majoring in French may graduate with "Honors in French" by successfully completing an approved senior thesis. Students should be aware of the written guidelines and consult with members of the department during the junior year or beginning of the senior year.

<sup>1</sup>On leave full year.

<sup>2</sup>Resident director, Colby in Caen, full year.

<sup>3</sup>Part-time.

<sup>4</sup>Resident director, Colby in Dijon, first semester only.

[115j] **Practical Phonetics** Phonetic analysis and transcription, using the international phonetic alphabet as applicable to French. *Two credit hours*.

125d, 126d, 127d, 127j French I, II, III Using the *French in Action* program, which combines video, audio, and print materials, students learn to speak, write, and understand French through a total immersion experience with the language and culture. Use of taped materials in the language laboratory is an integral part of the class work. Students are placed in the appropriate level by their score on the College Board French achievement test, a placement exam during fall orientation, or through consultation with a member of the faculty in French. *Four credit hours*. FACULTY

128d French IV: Explorations in Reading A course designed for students who wish to continue their studies in French. Reading of prose, theater, and verse primarily of the modern

period with continuing work in improving oral and written skills. Prerequisite: French 127. Three credit hours. MR. BRIGHT AND MS. MOSS

131d Conversation and Composition A course designed specifically for students wishing to develop oral skills and acquire an extensive modern vocabulary, with additional practice in writing short weekly compositions. Enrollment limited. *Prerequisite:* A score of 60 on the College Board French achievement test or placement test or French 127 or 128. *Three credit hours.* MR. FLOSOF AND MR. FERGUSON

**135d** Introduction to French Literature Introduction to the critical reading of French literature using selected prose, poetry, and theater. Emphasis on reading, discussion, and composition. *Prerequisite:* French 128 or appropriate College Board score. *Three credit hours*. MS. PALIYENKO AND MR. MAAZAOUI

**221, 222** History of French Literature A survey of important works and literary movements in the evolution of French literature from the middle ages to the present. First semester: middle age through the eighteenth century; second semester: nineteenth and twentieth centuries. *Prerequisite:* French 135 or placement by the department; French 221 is prerequisite for 222. *Four credit hours*. MR. BRIGHT AND MR. FILOSOF

231 Advanced Grammar and Composition An advanced language course intended for majors and others wishing to do further work in French. Required of students who seek admission to Colby in Caen. Intensive grammar review and frequent practice in writing French. *Prerequisite:* French 131 or 135 or permission of the instructor. *Four credit hours*. MR. WEISS

**232** Introduction to French Culture A course designed for students who have been accepted into the Colby in Caen program but open to other students as well. Major events and movements in the history of French civilization, with continuing practice in improving oral and written language skills. *Prerequisite*: French 231 or permission of the instructor. *Four credit hours*. MR. BRIGHT

**234** Intensive Spoken French Weekly practice in oral French, designed for participants in the Colby in Caen program. Drill sessions and conversation groups will be conducted by French exchange students and returning seniors under the direction of a faculty member. Nongraded. *Prerequisite:* Acceptance into the Colby in Caen program and concurrent enrollment in French 232. One credit hour. FACULTY

**†[331] Images of Women in French Literature** Study of literary pieces in France from the Middle Ages to modern times by both women and men in which the female experience forms the dominant theme. Analysis of how the imaginative work can be interpreted as a statement of values relative to women and how it reflects the social conditions that shape self-image and destiny. Class meetings are conducted in English; non-French majors may write papers and examinations in English. *Four credit hours*.

[335] Seventeenth-Century French Theater The classical theater: Corneille, Racine, and Molière. Non-French majors may choose to write papers and examinations in English. *Prerequisite:* A 200-level French course. *Four credit hours*.

[336] Eighteenth-Century French Literature The novel in the age of ideas. Works by Prévost, Rousseau, Diderot, Laclos, and others. Non-French majors may choose to write papers and examinations in English. Four credit hours.

[338] French Classical Comedy Theater analysis and performance through staged readings of the works of Molière, Marivaux, and Beaumarchais, with emphasis on the roles of the *commedia dell'arte* that recur in classical French comedy. Non-French majors may choose to write papers and examinations in English. *Four credit hours*.

[351] French Canadian Literature before 1968 Analysis of important literary works from Québec, beginning in the nineteenth century, and ending with the Quiet Revolution of the 1960s. Emphasis is on prose, theater, and poetry from 1940 to 1968. Non-French majors may choose to write papers and examinations in English. *Four credit hours*.

[352] French Canadian Literature, 1968 to the Present Readings in the literature of Québec from the end of the Quiet Revolution to the present. Topics will include experimental forms of the novel, of theater, and of poetry, the language question, nationalism, and the literature of feminism. Non-French majors may choose to write papers and examinations in English. *Four credit hours*.

[353] Francophone Women Authors The female literary tradition through detailed analysis of major French and French Canadian women writers. Topics will include the role of women in society, the autobiographical element in women's novels, feminism, and the gender specificity of *l'écriture féminine*. Non-French majors may choose to write papers and examinations in English. *Four credit hours*.

**358d1** Nineteenth-Century Representations of Self and Society: Myth and Fantasy Revisionary movements, both political and aesthetic, characterize nineteenthcentury France. By examining aesthetic shifts within the context of political and ideological revolution, the course will trace the evolving expression of the relation between self and world in nineteenth-century France and reexamine the role played by creative artists in constructing "myths" of personal identity and of reality. Readings include works by Lamartine, Desbordes-Valmore, Hugo, Baudelaire, Rimbaud, Mallarmé, Balzac, Sand, Flaubert, Zola, Huysmans, and modern critics. Non-French majors may write papers and examinations in English. *Four credit hours*. MS. PALIYENKO

[374] French Fiction and Film Comparative studies of works of fiction (novels or drama) and the films which these works have inspired. Authors studied might include Proust, Alain-Fournier, Camus, Anne Hébert. Films are in the original French without subtitles. Non-French majors may choose to write papers and examinations in English. *Prerequisite:* French 222 or permission of the instructor. *Four credit hours*.

[375] The French Novel of the Twentieth Century A close reading of selected novels from twentieth-century writers such as Vian, Robbe-Grillet, Wiesel, Lagorce, and Rezvani. Non-French majors may choose to write papers and examinations in English. Four credit hours.

**376** French Theater 1945–1970 An examination of the theater of existentialism (Sartre, Camus) and the theater of the absurd (Ionesco, Beckett, Genet, Adamov), with reference to the history and evolution of the French stage and theories of production. Non-French majors may write papers and examinations in English. *Four credit hours*. MR. WEISS

**397** Masterpieces of Classical Literature Study of Classicism and classical expression, primarily in works of theater and fiction during the Ancien Regime, with reference to classical models and to the underlying principles of absolute monarchy. Readings include works by Racine, Corneille, Marivaux, Beaumarchais, Prévost, and others. Non-French majors may write papers and examinations in English. *Four credit hours*. MS. MOSS

**398A** Women in African Literature of French Expressionism The culture of the "other" women, Africa, Islam—through analysis of literary texts by Moroccan, Senegalese, and Algerian writers. The religious, social, and legal status of women in Africa today, and how these issues are dealt with in the themes of structures of literature. Non-French majors may write papers and examinations in English. *Four credit hours*. MR. MAAZAOUI

**398B** The French Renaissance The various guises of Humanism, with special attention to cultural/historical aspects of sixteenth-century life and their expression in literature (Reformation, revolution in the fine arts, the rise of the printed book, the quest for a "French" style, the role of women readers and authors). Readings in Marot, Héroët, Sceve, Labé, Rabelais, Marguerite de Navarre, Du Bellay, Ronsard, Montaigne, and Agrippa d'Aubigné. Further readings in minor authors and modern critics. Non-French majors may write papers and examinations in English. *Four credit hours*. MR. BRIGHT

412 Advanced Composition An advanced practical course designed to develop and apply—through themes and versions—the grammatical, linguistic, and syntactic skills essential to proper written and oral expression. Enrollment limited. *Prerequisite*: French 231 or permission of the instructor. Four credit hours. MR. FILOSOF

**491, 492 Independent Study** Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. *Two to four credit hours*. FACULTY

[493] Seminar in French Literature Topics may cover an author, a genre, a literary theme, or movement. Four credit hours.

**494** Senior Thesis The student works closely with the thesis director and committee throughout the student's last semester on the elaboration of the thesis project. *Prerequisite:* Permission of the instructor and of the department. *Four credit hours*. FACULTY

# Geology

Chair: ASSOCIATE PROFESSOR ROBERT NELSON

Professors Donald Allen and Harold Pestana; Visiting Professor E. Donaldson Koons<sup>1</sup>; Associate Professor Nelson; Assistant Professor Paul Doss; Teaching Associate Bruce Rueger

If one is interested in our planet—how it developed its present characteristics and what may happen to it in the future, where we came from and what supports us on the planet, our resources and their use—geology is a central area of study. The Geology Department features an unusually fine rock and mineral collection for study, an excellent small-college library, various geophysical instruments, a state-of-the-art powder x-ray diffractometer for determining mineral identities, and access to the College's transmission and scanning electron microscopes. (The setting of the College also provides an intriguing area for field study.) Students are encouraged to work on independent projects and to develop ways of actively examining and interpreting observational data.

Departmental field programs in the Mojave Desert of California and Bermuda also provide unique off-campus experiences.

The department offers four major programs and a minor for students with different interests. For each option, at least one independent January program is required to be taken in the major during the junior or senior year. The point scale for retention of the major applies to all courses taken in the major. No requirement may be taken satisfactory/unsatisfactory. Requirements for the Basic Major in Geology

Geology 141, 142, 215, 232, 251, 271, 331, 351, 381, 382, 452; at least three hours of 491 or 492; Mathematics 121, 122; Chemistry 141, 142; Physics 121, 122 or 132, 231 (or 141, 142).

The Earth Science Option is offered for students planning to teach in the secondary schools; the requirements are: Geology 141, 142, 215, 251, 292, 311 (or 312), 351, 381; Chemistry 141.

The Environmental Science Option is designed to provide students with a core of geology courses supplemented by related courses from other departments. The requirements are: Geology 141, 142, 215, 311, 494; Biology 161, 162, 271; Chemistry 141, 142, 217 (or any of the following: 241, 242, 331, 332); Mathematics 121, 231; Physics 112 or 121 or 141 or 132; Economics 133, 134, 231. Related courses include: Biology 311, 314, 316, 318, 332, 352, 354, 356, 358; Geology 172 (or 176), 232, 333, 354; Mathematics 122, 382; Physics 122 or 142 or 231; Economics 293, 498.

Requirements for the Major in Geology-Biology

In geology: 141, 142, 215, 251, 271, 311 (312), and 372.

In biology: 161, 162, 271, and one other course chosen from 156, 311, 312, 314, 352, 354. Other courses: Chemistry 141, 142, Mathematics 121 and one course chosen from Mathematics 122, 231, 381.

The point scale for retention of the major applies to all courses in geology and biology. Requirements for the Major in Geology-Chemistry

In geology: 141, 142, 215, and two courses from 352, 381, or 382.

In chemistry: 141, 142, 331, 341. Chemistry 241, 242, and 332 are also recommended. A Graduate Record Examination in geology or chemistry must be taken in the senior year. Students should consult one of the major advisers regarding election of languages and other required courses in the first and sophomore years.

The **Bermuda Semester**. Majors may earn 13 credit hours in field study of coral reefs and carbonate environments. Geology 251, 312, 314, and 316 are occasionally offered by Colby faculty using the facilities of the Bermuda Biological Station.

**Requirements for a Minor in Geology** 

A minor in geology is available to students majoring in other disciplines who also desire an understanding of earth science. Minor programs will be tailored to the needs of individual students; course selection should be done only after consultation with the minor adviser. Requirements are Geology 141, 142, and five courses selected from Chemistry 141, Physics 121, and Geology courses numbered 215 and above.

Attention is called to the interdisciplinary concentration in applied mathematics.

<sup>1</sup>Part-time, January only.

131 Environmental Geology An examination of both the controls of human activities by geology and the impact of humans on natural geologic processes; a survey of fundamental geologic processes and associated hazards (earthquakes, volcanic eruptions, floods, etc.); the exploitation of geologic resources (energy, minerals, water, soils), and topics such as pollution, waste disposal, and end-use planning. An opportunity to discuss, from a geologic perspective, the ramifications of and potential solutions to problems associated with Earth's resources. Three credit hours. MR. DOSS

141d, 142 Introduction to Geological Science The Physical Earth and its past. Emphasis in 141 is on earth materials and physical processes active in molding the modern Earth, from plate tectonics to glaciation; 142 is devoted principally to the physical and biological evolution of the Earth. Lecture and laboratory; laboratory includes mandatory field trips (including an allday weekend trip in 141). Enrollment limited; when pre-enrollment exceeds capacity, priority will be in order of class standing: first-year students through seniors. *Prerequisite for 142*: Geology 141. Four credit hours. FACULTY 161j Paleontology for Non-majors An introduction to the principles of paleontology. Laboratory work concentrates on environmental interpretation through the use of fossils. Enrollment limited. *Prerequisite*: Permission of the instructor. *Three credit hours*. MR. PESTANA

**172** Oceanography A descriptive introduction to physical, dynamical, and biological oceanography. Topics will include: the structure and composition of the ocean and its floor; tides, currents, and other important dynamic features; the nature of ocean life. The value of the oceans for food and physical resources will be discussed. Lecture. *Three credit hours*. MR. PESTANA

**215 Mineralogy** Physical properties and chemical structure of minerals leading to investigation of the chemical composition and optical properties of minerals. Lecture and laboratory. *Prerequisite:* Geology 141, Chemistry 141 (may be taken concurrently), or permission of the instructor. *Four credit hours.* MR. ALLEN

**232** Structural Geology Processes and results of deformation of rocks, including stress and strain, faults, folds, joints, and rock fabrics. *Prerequisite*: Geology 142. *Four credit hours*. MR. ALLEN

**251** Invertebrate Paleontology Morphology of invertebrates and general principles, including nomenclature, taxonomy, paleoecology, evolution, correlation, and techniques of identification. Lecture and laboratory. *Prerequisite:* Geology 142 or one year of biology. *Four credit hours*. MR. PESTANA

[252] Micropaleontology An independent study laboratory course covering one or more of the major microfossil groups. Emphasis will be on identification, age determination, and environmental interpretation. *Prerequisite*: Geology 251 or permission of the instructor. *One to four credit hours*.

[254] Advanced Invertebrate Paleontology An independent study laboratory course involving a detailed investigation of one or more invertebrate groups. Emphasis will be on identification, age determination, and environmental interpretation. *Prerequisite*: Geology 251 or permission of the instructor. *One to four credit hours*.

258j, 258 Field Geology A course of studies to be conducted off campus in a region whose climate permits field study of geologic features. Emphasis will be placed on development of fundamental concepts, analysis of field data, field identification of lithotypes, basic mapping techniques, and recognition of geomorphic features and their genetic significance. Grades will be based on field notes, reports, and maps submitted following independent projects, which will be conducted periodically over the duration of the course. *Prerequisite:* Geology 141 and permission of the instructor. *Two or three credit hours*. FACULTY

[271] Computer Applications and Mathematical Methods in the Earth Sciences An introduction to computer applications and mathematical methods in the earth sciences, to provide appropriate tools for more quantitative approaches to geological problems in advanced courses. *Prerequisite:* Geology 141, 142, and permission of the instructor. *Three credit hours*.

**292j Meteorology** Physical properties of the atmosphere, the origin and classification of weather types, air mass analysis and principles of prediction, and meteorology of air quality. Does not satisfy the science requirement. Lecture. *Two credit hours*. MR. KOONS

**311 Sedimentation** Processes of sedimentation, methods of analysis of sediments, the description and interpretation of environments of deposition, and the classification and description of sedimentary rocks. Lecture and laboratory. *Prerequisite*: Geology 142 and 215. *Four credit hours*. MR. PESTANA

[312] Sedimentation and Carbonate Sediments Sedimentary processes, environments of deposition, and the classification and description of sedimentary rocks. Emphasis will be on carbonate sediments and the biological aspects of sedimentation. Taught at the Bermuda Biological Station. Students cannot receive credit for Geology 311 and 312. Lecture and laboratory. *Prerequisite:* Geology 142 and 215. *Four credit hours*.

[314] Field Study in Bermuda Field and laboratory study of selected topics dealing with coral reefs, carbonate sediments, or other aspects of the Bermuda environment. Corequisite: Geology 251d2 and 312. Five credit hours.

[316] Natural and Social History of Bermuda Selected topics in the natural and social history of Bermuda. Taught at the Bermuda Biological Station. Course consists of lectures and field trips by the Colby Bermuda Program director(s) and additional lectures by the Biostation staff, Bermuda residents, and visiting Colby staff. *Two credit hours*.

[331] Tectonics Large-scale features and physical processes of the crust, mantle, and core of the earth are discussed, and the constraints imposed by several areas of research are summarized. In this setting, the concepts of plate tectonics are explained and applied. *Prerequisite:* Geology 232 and Physics 121 or 141 or 231, or permission of the instructor. *Three credit hours*.

[333] Geophysical Prospecting Gravitational, magnetic, electromagnetic methods, and geologic mapping commonly used in mineral exploration, are studied and applied to local field areas. *Prerequisite:* Geology 232 and Physics 122 or 142 or 231, or permission of the instructor. *Four credit hours*.

[336] Seismology Principles of collection and interpretation of seismic data. Both naturally occurring (earthquake) sources and artificial sources will be considered. Body waves (P- and S-) and surface waves will be discussed in determining local and global structure. *Prerequisite:* Geology 232, Mathematics 121 or 123, and Physics 121 or 141 or 132, or permission of the instructor. *Four credit hours*.

**351d2** Principles of Geomorphology The origin, history, and classification of landforms and the processes that shape the earth's surface. Emphasis on study of physical processes. Lecture and laboratory. At least one all-day field trip required. *Prerequisite*: Geology 142 or 232. *Four credit hours*. MR. NELSON

**†[352j]** Dating Techniques in Geology The use of radioactive isotopes and their decay as a means of determining the ages of rocks and other geological deposits. Nonradiometric techniques will also be examined, with particular attention to their applicability and reliability. Lecture only. *Prerequisite*: Geology 142, Chemistry 141. *Two credit hours*.

**353** Groundwater Hydrology A survey of the hydrologic cycle, with specific attention to those components of the cycle related to the sources and occurrence of groundwater resources; the factors that govern the movement of groundwater through aquifers, and the physical and chemical changes that result from passage through the hydrologic cycle. An introduction to

techniques used in groundwater quantity and quality investigations. *Prerequisite*: Geology 141 and Mathematics 121 or 123 or permission of the instructor. *Three credit hours*. MR. DOSS

**†[354]** Glacial and Quaternary Geology Theorigin and development of glaciers and their influence on the landscape, both as erosive forces and as transporters of new earth materials. Geological and biological evolution of the landscape during the Quaternary, the most recent of the geological periods. Lecture and laboratory with field trips (including two all-day Saturday trips). Normally offered in odd-numbered years. *Prerequisite:* Geology 142. *Four credit hours*.

[358] Geological Field Study A spring-recess field trip to a selected area. Students must cover expenses. *Prerequisite*: Permission of the instructor. One credit hour.

**372d1** Quaternary Paleoecology Reconstruction of biological environments on land for the recent geologic past, based on the fossil remains of plants and animals preserved in sediments. Emphasis will be on the use of pollen in reconstructing past vegetation types, but other groups of organisms will be included. Extrapolation of past climatic parameters from the biological data. Lecture and laboratory. Normally offered in even-numbered years. *Prerequisite:* Geology 142 and Chemistry 141. Geology 354 and Biology 311 are recommended. *Four credit hours.* MR. NELSON

**374** Ore Deposits An investigation of the genesis and localization of ore deposits. Topics may include the history of mineral deposits, materials, and formation of ore deposits, supergene sulfide enrichment, paragenesis and zoning, epigenetic versus syngenetic deposits, magmatic segregation deposits, and mineral deposits related to regional tectonic environments. *Prerequisite:* Geology 215 and Chemistry 141. *Three credit hours*. MR. ALLEN

381, 382 Optical Mineralogy; Igneous and Metamorphic Petrology First semester: determination of mineral composition and properties using a petrographic microscope and X-ray powder diffraction techniques. Second semester: hand-specimen and thin-section examination of igneous and metamorphic rocks to determine structure, composition and origin. Lecture and laboratory. *Prerequisite:* Geology 215; Geology 381 is prerequisite for 382. *Four credit hours*. MR. ALLEN

**452** Stratigraphy Principles of stratigraphy. Includes a study of the relationships and correlation of sedimentary rocks. Laboratories include work with index fossils and a detailed analysis and correlation of well samples. Lecture and laboratory. *Prerequisite:* Geology 251. *Four credit hours*. MR. PESTANA

491, 492 Independent Study Field and laboratory problems in geology or environmental problems, with regular reports and a final written report. *Prerequisite:* Permission of the instructor. One to four credit hours. FACULTY

494 Environmental Geology Selected topics dealing with environmental quality. Extensive individual investigation. Prerequisite: Permission of the instructor. Three or four credit hours. MR. DOSS

# German

In the Department of German and Russian. Unless otherwise specified, all courses are conducted in German.

Associate Professors Hubert Kueter and James McIntyre<sup>1</sup>; Assistant Professors Ursula Reidel-Schrewe and Margrit Lichterfeld Thomas<sup>2, 3</sup>; Visiting Assistant Professor Lore Ferguson<sup>2</sup>; Language Assistant Marc Damitz

The German program is based on the recognition of a rich cultural heritage and of an infamous historical past. It observes closely the emergence of a united Germany within the context of the resolving East-West conflict and the expanding European community. In the broader perspective of international relations the German language will be increasingly important. The German program is devoted to teaching the language skills, to providing the information, and todeveloping the ability to analyze and understand German culture and literature. These mester program in Lübeck and the January program in Konstanz are designed to give students at the lower level a head start in speaking German and to facilitate further study in this field.

Achievement Test: If a student offers a foreign language for entrance credit and wishes to continue it in college, that student must either have taken the College Board achievement test in the language or take the placement test during orientation.

Requirements for the Major in German

Eight semester courses numbered above German 127.

As of the Class of 1994: Nine semester courses numbered above German 127, including German 131, 135, 231, 232 or 233, at least one course in each of the following areas: 18th century literature, 19th century literature, 20th century literature, and German 493 or 494.

Requirements for the Minor in German Five semester courses numbered above German 127, including German 131, 135, 231, 232 or 233, and one literature course at the 300 level.

German majors and minors are encouraged to explore German culture and history through related courses in other departments, such as Art 314, 331, 351, 352, Government 233, History 131, 132, 232, 314, 315, 316, 357, 493, Music 115j, Philosophy 359, Religion 215, 216.

German majors are encouraged to spend at least one semester, preferably the spring semester of their junior year, in Germany or Austria at a program approved by Colby.

The following statements also apply:

(1) The point scale for retention of the major is based on all German courses beyond German 127.

(2) No major or minor requirements may be taken satisfactory/unsatisfactory.

(3) No more than the equivalent of four semester courses of foreign study or transfer credit may be counted toward the major or minor.

(4) All majors in the department must take at least one course in the major approved by the major adviser each semester until graduation.

(5) Majors would normally take courses offered for variable credit for four credits.

*Teacher Certification*: Students desiring certification for teaching German should consult the Department of German and Russian and the Education Department.

<sup>1</sup>Resident director, Colby in Lübeck. <sup>2</sup>Part-time.

<sup>3</sup>Associate dean of faculty.

[119] Introduction to Intermediate German Practice in speaking and listening skills and review of basic grammar. Intended for students electing German 127j in Konstanz. Does not fulfill the language requirement. Enrollment limited. *Prerequisite:* German 126 or appropriate score on the College Board German achievement test. One credit hour.

125, 126 Elementary German Basic comprehensive course for students with little or no previous knowledge of German. Development of all four skills: listening, speaking, reading, and writing. Introduction to contemporary life in the German-speaking countries. Audio and video

## 104 GERMAN

material accompanies textbook instruction; exercises in the language lab and at the computer are part of daily preparation. *Four credit hours*. FACULTY

126, 127, 131, 132 Colby in Lübeck Intensive use of language skills in Lübeck, Germany. *Prerequisite:* German 125 or appropriate score on the College Board achievement test. *Sixteen credit hours*. MR. MCINTYRE

127 Intermediate German Continued practice in speaking and listening skills; grammar review; readings and conversation based on topics from German culture; emphasis on the practical use of the language. *Prerequisite*: German 126 or appropriate score on the College Board German achievement test. *Four credit hours*. FACULTY

[127j] Intermediate German Intensive practice in conversational and writing skills in Konstanz; emphasis on the practical use of the language. *Prerequisite*: German 119. *Three credit hours*.

131d2 Conversation and Composition Emphasis on oral expression and facility in writing. Vocabulary building through reading and discussion of short literary texts by authors such as Gerhart Hauptmann, Thomas Mann, Franz Kafka, and Bertolt Brecht. *Prerequisite*: German 127 or permission of the instructor. *Four credit hours*. MR. KUETER

132j Introduction to German History and Culture Taught only in conjunction with a study abroad program in Konstanz. Readings and discussions in German. Field trips to museums and architectural monuments. *Prerequisite*: German 127 or permission of the instructor. *Three credit hours*. MR. KUETER

135 Introduction to German Literature Readings in all three genres: drama, prose, and poetry. Designed to develop skills in literary analysis and close reading of texts and to introduce writings of major authors representative of their period. Continued practice in conversation and composition. *Prerequisite:* German 131 or equivalent. *Three credit hours*. MS. FERGUSON

**231** Advanced German Comprehensive review of all aspects of German grammar with attention to specific grammatical problems and usage of a more specific vocabulary. Close reading of short texts, practice in free composition, and writing on directed themes. *Prerequisite*: German 131 or 135. *Four credit hours*. MR. KUETER

**232** Survey of German Culture From the Middle Ages to the Weimar Republic, the course deals chronologically with the major trends in German history and culture as reflected in literature, art, music, and philosophy. Reading of German expository prose, accompanied by documentary texts and short films. Students contribute through reports and improvised dialogues. *Prerequisite*: German 135 or permission of the instructor. *Three or four credit hours*. MS. REIDEL

[233] Introduction to Contemporary German Culture From the Nazi era to the present. Discussion of major trends in the development of East and West Germany after World War II. Topics include the role of women, youth and popular music, environmental problems, the media, and foreign workers. Extensive use of current literary and cultural materials, including films. Continued practice in conversation and composition. *Prerequisite:* German 135 or permission of the instructor. *Three or four credit hours*.

**331 Business German** Introduction to the terminology necessary to understand the socioeconomic structure of German society. Information about the banking system, the structure of corporations, social protection, the media, and the code of behavior in the German business world. Discussion of the contrasts between German and American business policies as factors of cultural difference. *Prerequisite:* German 231 or permission of the instructor. *Three credit hours*. MS. REIDEL

[333] German Women Writers A survey of German women writers and their works from the Romantics to contemporary Austrian, West German, and East German writers. Both literary texts and some feminist documents will be read. Contemporary feminist theory will be discussed. Three or four credit hours.

[351] The Medieval Epic An introduction to the history, culture, literature, and language of medieval Germany; study of the three major epics of the period: the Nibelungenlied, Parzival, Tristan und Isolde; reading of New High German translations with sample readings of Middle High German texts. Three or four credit hours.

[352] Topics in the History of German Literature The youthful hero in four centuries of German literature. The study of four important works in German literature representing four major periods: Simplizissimus, 17th century (Baroque); Werther, 18th century (Storm and Stress); Prinz von Homburg, 19th century (Romanticism); Die neuen Leiden des jungen WLG, 20th century (contemporary LDR). Three or four credit hours.

**353d2** Topics in Eighteenth-Century German Literature From the Enlightenment to the classical period. Close reading and interpretation of works by Lessing, Kant, Herder, Goethe, and Schiller. *Three or four credit hours*. MS. LICHTERFELD THOMAS

[355] Topics in Nineteenth-Century German Literature From Romanticism to Realism. Comparative reading of works by Novalis, Eichendorff, Kleist, E.T.A. Hoffmann, Stifter, Keller, and Büchner. Analysis will focus on the changing conception of nature and the individual. Three or four credit hours.

**358d1** Topics in Twentieth-Century German Literature Reading and discussion of representative works of fiction, drama, and lyric poetry. Authors include Thomas Mann, Rilke, Kafka, Brecht, Max Frisch, Christa Wolff, Volker Braun, Peter Handke. *Three or four credit hours*. MS. REIDEL

**491, 492** Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor. *Two to four credit hours*. FACULTY

[493] Seminar in German Literature Topics may cover an author, a genre, a literary theme or movement. Four credit hours.

**494 Senior Project Seminar** Conclusion of the study in the field of German with a research paper on a literary work or a study of a specific cultural phenomenon depending on the interest of the participating senior. In the seminar session students explain their individual topics, discuss the different aspects of their project, report on the progress of their research, and receive suggestions from instructor and students on sorting, organizing, introducing, and discussing material, articulating and defending an argument. Seniors are encouraged to explore in more detail and depth a topic of their choice based on prior coursework. *Four credit hours*. FACULTY

# German and Russian

#### Chair, ASSISTANT PROFESSOR ANTHONY ANEMONE

Associate Professors Hubert Kueter, James McIntyre, and Sheila McCarthy; Assistant Professors Anemone, Margrit Lichterfeld, Ursula Reidel-Schrewe, and David Hanson; Visiting Assistant Professor Lore Ferguson; Visiting Instructor Vivian Pyle; Language Assistants Marc Damitz and Mikhail Liadov

The Department of German and Russian offers courses in the languages, literatures, and cultures of two of the major European countries, leading to a major or minor in German language and literature and a minor in Russian language and literature. In addition, students may elect an interdisciplinary major in Russian studies through the program in Russian and Soviet studies.

Both the German and Russian programs are dedicated to the idea that foreign countries and peoples are impossible to understand without a thorough knowledge of the national language and literary and cultural traditions. The study of foreign languages and literatures also inevitably increases one's awareness of one's own culture. Students of both German and Russian are encouraged to supplement their on-campus courses with study programs in Germany and the Soviet Union. German programs in Lübeck (semester) and Konstanz (January) are administered by Colby faculty members. Colby students participate in several semester and summer study opportunities in the U.S.S.R., and students who have completed three years (or the equivalent) of Russian language study are eligible for the American Collegiate Consortium exchange program which offers a year of study (junior year abroad) at a variety of Soviet universities and institutes.

Requirements for the majors and minors in German and Russian are listed in the appropriate language sections, German, Russian, and Russian and Soviet Studies.

## Government

#### Chairman, PROFESSOR L. SANDY MAISEL

Professors Albert Mavrinac<sup>1</sup>, William Cotter<sup>2,3</sup>, Maisel, G. Calvin Mackenzie<sup>4</sup>, Roger Bowen<sup>4</sup>, and Charles Hauss; Visiting Professors Morton Brody<sup>5</sup> and Joseph Lee; Associate Professor Kenneth Rodman; Assistant Professors Pamela Blake, Beverly Hawk, Guilain Denoeux, and Anthony Corrado<sup>6</sup>; Visiting Instructor John Martin<sup>5</sup>

The Department of Government offers a wide range of courses in American government and politics, comparative government and politics, international politics, political theory, and research methods and quantitative analysis. The departmental goals include exposing students to a variety of forms of governments and of intergovernmental activities and to the means for studying these governments and their actions.

Internships are encouraged, so that students can experience the practical as well as the more theoretical aspects of the field. The interdisciplinary program in public policy also furthers this goal. In addition, for those students who intend to pursue the study of government in more depth, the department offers an honors program which emphasizes substantial independent research under the close guidance of one or two members of the faculty. Successful completion of this program will result in the degree being awarded "With Honors in Government."

**Requirements for the Major in Government** Nine semester courses in government, including Government 111 and 112, one course at the 200 or 300 level in each of the four sub-fields defined below, and a senior seminar.

Government 111 and 112 are designed as introductions to the discipline. The sub-field requirement provides for a broad background within the field. The senior seminars, which cross

the sub-fields and are sometimes taught in conjunction with other disciplines, are designed to be culminating experiences within the field; each seminar will require a major research paper to coordinate the materials studied in the major.

All requirements for the major must be taken at Colby. Courses transferred from other institutions and/or field experience courses can count (up to a maximum of two) in the ninecourse requirement, but they may not be substituted for the introductory, distribution, or seminar requirements. Students taking government courses abroad **must** secure provisional approval for each course **prior** to leaving; upon return to Colby, brief descriptions of work completed must be submitted to the department for final approval.

Sub-fields for the departmental distribution requirements are defined as follows: Political Theory: Government 213, 217, 218, 255, 316.

American Government and Politics: Government 273, 275, 276, 313, 314, 317, 354, 356, 392. Comparative Government and Politics: Government 231, 233, 237, 253, 258\*, 259, 271\*, 277, 332\*, 357, 358, 359, 372\*.

International Relations: Government 215, 239, 252, 257, 258\*, 271\*, 332, 334, 336, 341, 342, 372\*.

\*Courses marked by an asterisk can be counted in either of the two sub-fields but not both. Courses not listed by sub-field above count toward the major, but not for the departmental distribution requirements.

Government 300-level courses are normally limited to 35 students; 400-level courses to 15 students.

Attention is called to the interdisciplinary major in international studies and the minors in public policy and in quantitative analysis.

<sup>1</sup>Reduced-time. <sup>2</sup>Part-time first semester only. <sup>3</sup>President of the College. <sup>4</sup>On leave, first semester. <sup>5</sup>Part-time second semester only. <sup>6</sup>On leave, second semester.

111 Introduction to American Government and Politics An examination of the ideas and values that underlie the American political system, and of their contemporary manifestations in institutions, processes, and policies. Coordinated lectures presented by several members of the government faculty in their areas of specialization. Open to first-year students and, by departmental permission, to others majoring in government. *Four credit hours*. FACULTY

112 Comparative Politics: An Introduction to Politics Outside the United States A comparative analysis of politics in liberal democracies, "communist" countries, and the Third World. Coordinated lectures presented by several members of the government faculty in their areas of specialization; discussion sections headed by individual faculty members. Themes addressed include the origins of the state, political culture, political participation, state structures, and the interaction of state and society. *Four credit hours*. FACULTY

\*113j Introduction to South African Politics The origins and consequences of the Apartheid system. Films, novels, and political writings tell the story. Three credit hours. MS. HAWK

[139j] January in the Soviet Union A trip to the Soviet Union, focusing on political and social affairs. In some years, the trip will be led by a government professor and the course will automatically count toward the major; in other years, students majoring in government may

seek permission for major credit based on writing an independent research paper. Enrollment limited. *Prerequisite:* Permission of the instructor. *Three credit hours*.

[213] Classical Western Political Theory Classical Western approaches to the nature of the political order, treating such theorists and their historical periods as Plato, Aristotle, Augustine, Aquinas, Machiavelli, Hobbes, Locke, and Montesquieu. *Four credit hours*.

**215** Introduction to International Relations An introduction to the major issues within the field of international relations and the theoretical approaches that have been developed to understand these issues. *Four credit hours*. MR. RODMAN

**217** Introduction to Western Political Theory A survey of some of the ideas and texts that have made a difference in Western culture, considering the works of major political theorists from Plato through Nietzche. Political philosophers address fundamental questions about how women and men should live; questions about the role of institutions, about citizenship and the role of government, about the potential usefulness and limits of rational knowledge, and about the transformation of society and politics. Students will develop an understanding of the various philosophical orientations which comprise "the Western Tradition" and of discordances within and between schools of thought and an enhanced understanding of contemporary political life, problems, and possibilities. Enrollment limited. *Four credit hours*. MS. BLAKE

\*218 Modern Western Political Theory Nineteenth- and twentieth-century Western thought on the political order, with particular attention to such theorists as Rousseau, Hegel, Marx, Bentham, Burke, Mill, Nietzsche, and Dewey, and to select twentieth-century radical and conservative critics. *Four credit hours*. MS. BLAKE

**219d2** Introduction to Research Methods for Political Science Introduction to simple techniques for quantifying concepts and relationships of interest to political scientists, and to the use of the computer. Intended for students with little or no exposure to the computer or to quantitative methods. Enrollment limited. *Prerequisite:* Government 111 and 112, or permission of the instructor. *Three or four credit hours*. MS. HAWK

**231** Race and Ethnicity in Comparative Perspective An exploration of the role race and ethnicity play in politics as the twentieth century draws to a close, focusing on South Africa, the Soviet Union, Great Britain, and the United States. Why are these such divisive issues? How are racial and ethnic demands placed on governments? How do they respond? Why have almost all countries had tremendous difficulty in solving political problems based on race or ethnicity? Not open to first-year students. *Four credit hours*. MR. HAUSS

**233 European Politics** An exploration of politics and political development in France, Great Britain, Germany, and Poland, focusing on understanding how current issues facing Western Europe reflect social, economic, and historical trends. Emphasis on the changes sweeping through Eastern as well as Western Europe and the prospects for European integration. *Prerequisite:* Government 112 or permission of the instructor. *Four credit hours*. MR. HAUSS

[237] Political Development in Modern Japan The political, cultural, historical, and economic dynamics of Japan's drive to modernize since the 1868 Meiji Restoration. Special attention will be given to the ongoing conflict between the proponents of liberal democracy and those favoring an oligarchic, authoritarian governmental system. *Prerequisite*: Government 112 or permission of the instructor. *Four credit hours*.

[239] The Nuclear Age An inquiry into the threat and consequences of nuclear war. The

course will consider the way nuclear weapons work, the history of the nuclear arms race, the current tensions between the superpowers, and the possible solutions for the problems associated with "the bomb." Enrollment limited. *Four credit hours*.

**†[252] United States Foreign Policy** An analysis of the major international issues facing the United States with an emphasis on the role of the international system, ideology, perceptions, economic interests, and domestic institutions. Topics include the origins of the Cold War, nuclear strategy, containment and detente, relations with Europe, Japan, and the Third World. Government 215 is recommended but not required. *Four credit hours*.

**253** Soviet Politics An introduction to politics in the Soviet Union, focusing first on the historical evolution of the Soviet Union as it became one of the two superpowers of the nuclear age and also on the current attempts by Gorbachev and his colleagues to restructure the Soviet political and economic systems. *Prerequisite:* Government 112 or permission of the instructor. *Four credit hours*. MR. HAUSS

**†[255]** Introduction to American Political Thought A survey of the fundamental principles of American political thought as presented in primary source documents and writings. General themes include the notion of republican government, the concepts of liberty and equality, the role of commerce in a democratic society, and the foundations of social justice. Enrollment limited. *Prerequisite:* Government 111 or permission of the instructor; preference to government and American studies majors. *Four credit hours*.

**256** State Government An introductory course in American government with emphasis on state government; a study of the various types of systems used in the fifty states to distribute powers, functions, and services to the citizens. Enrollment limited. *Three credit hours*. MR. MARTIN

**†[257]** The United States and the Third World A study of U.S. relations with developing countries focusing on political, economic, and ideological motivations. Case studies include responses to revolutionary change in China and Vietnam, covert interventions, foreign aid, human rights, economic sanctions against South Africa, and the New International Economic Order. Government 112 is recommended but not required. *Four credit hours*.

258j The Israeli/Palestinian Conflict Supplemented by personal accounts, novels, and videotapes, the course explores the historical, human, and psychological dimensions of the struggle between Palestinian Arabs and Israeli Jews, from the Palestine Mandate through the various wars between Israel and the Arab states, and up to the intifada and other recent developments. Enrollment limited. *Three credit hours*. MR. DENOEUX

**259 Politics of the Middle East** An introduction to the internal politics of Middle Eastern countries. Themes and subjects include the origins of the state system in the Middle East, the challenges of modernization and political development, the relationship between religion and politics, leaders and their strategies of political control, institutions of government, and political regimes in the region. *Prerequisite:* Government 112 or permission of the instructor. *Four credit hours*. MR. DENOEUX

**†**[271] War and Revolution in Vietnam The significance of the Vietnam War; the Vietnamese Revolution as it compares with other revolutions; and the impact of the war on American politics and public policy. Enrollment limited; preference given to government, history, and East Asian cultures and languages majors. Also listed as History 272. Prerequisite: Government 112 or permission of the instructor. Four credit hours.

## 110 GOVERNMENT

**275j** The Committee System in the United States Congress An examination of the process through which Congressional committees make decisions in the modern Senate. During the first part of the course professional political science literature on committee performance will be read. The second part of the course will follow a specific piece of legislation through the appropriate committee in a concentrated simulation. *Prerequisite:* Government 111. *Threecredit hours*. MR. MAISEL

**276 The American Presidency** The organization, powers, and actions of the executive branch of the American government examined in historical and contemporary perspective. Special emphasis on case analysis. Enrollment limited. *Prerequisite:* Government 111 or permission of the instructor. *Four credit hours*. MR. MACKENZIE

**277** African Politics Introduction to African politics with case studies of Kenya, Tanzania, South Africa, Algeria, Zimbabwe, and Nigeria. An interdisciplinary approach offers an understanding of African culture through films, novels, historical writings, and political essays. *Four credit hours*. MS. HAWK

**294** Research Design The great questions facing any research planner are questions of design. In this course students will learn the important skills of designing and writing a sophisticated research proposal, designing their own proposals for a major research project after discussions about "scientific thinking" and a review of good and faulty research designs. The course is a prerequisite for Honors in Government. *Prerequisite*: Permission of the department. *Three or four credit hours*. MR. MAISEL

**295j** Internship Month-long internships in offices such as those of attorneys, congressmen, senators, and state legislators. Nongraded. *Two or three credit hours*. FACULTY

**312d1** Directions in Feminist Theory Women's economic, social, and cultural movement over the past fifteen years has challenged socioeconomic hierarchies and the knowledge(s) that sustains them. The scope and dimensions of feminist theories of sexual differences and sexual freedom. Four credit hours. MS. BLAKE

**313** American Constitutional Law I An introduction to the United States Supreme Court, constitutional litigation, and the political process by way of an emphasis on the Court and its relationship to the structure of national government, federalism, national economic development, and modern civil rights doctrine. *Four credit hours*. MR. MAVRINAC

[314] American Constitutional Law II The United States Supreme Court and the modern era of civil rights litigation. Four credit hours.

**315j** Federal Budget Policy An examination of the federal budget process and the politics of budget policymaking: an intensive analysis of the budget process and recent policy developments, and an exploration of the political dimensions of budget decision making through a simulation exercise. Enrollment limited. *Prerequisite:* Government 111 or permission of the instructor. *Three credit hours*. MR. CORRADO

[316] Foundations of American Constitutionalism An examination of the philosophical foundations of the Constitution and American political thought at the time of the founding through an analysis of the writings of Hobbes, Locke, Montesquieu, and selected Federalist and Anti-federalist essays. Enrollment limited. *Prerequisite:* Government 111 or permission of the instructor. *Four credit hours*.

**†[317]** The Policymaking Process An examination of the policymaking process, including such topics as agenda setting, program formulation, consensus building, implementation, and the use and misuse of policy analysis. Special attention to methods and techniques of policy evaluation. Primary focus on policy making at the national level in the United States government. Enrollment limited. *Prerequisite:* Government 111 or 112. *Four credit hours*.

**319** Law and Social Change: Women and Minorities The legal "case method" will be used to focus on the judicial process—particularly the United States Supreme Court—as it has dealt with problems of slavery, racial equality and discrimination against women in the United States, and, to a lesser extent, in England. The course investigates affirmative action, school segregation, abortion, rights of privacy, sex discrimination and discrimination against homosexuals. The Socratic method of teaching is used, and regular class participation is required of all students. Enrollment limited. Seniors, regardless of major, are given preference. Three credit hours. MR. COTTER

**†[332]** Political Development in the Third World Political change in selected "Third World" nations, including revolution and counterrevolution in Latin America, development in South Africa, the Israeli-Palestinian conflict, and the role and influence of the United States in such change. *Prerequisite:* Government 112 or permission of the instructor. *Four credit hours*.

[334] North/South Relations The schism between north and south has ramifications for all of the issues we study in international relations. This course will provide a critical examination of the most important theoretical approaches to north/south relations. The course will contrast the economic and political positions of states with differing economies. In this way, students can begin to understand the factors which influence the relations between advanced industrial states and states with other economic histories. *Prerequisite:* Government 112 or permission of the instructor. *Four credit hours*.

**336** International Organization The structure, politics, and current operation of international organizations within the nation-state system. Topics include conflict resolution, nonproliferation, human rights, and international economic cooperation. *Prerequisite:* Government 215 or permission of the instructor. *Four credit hours*. MR. RODMAN

**337** Business and American Foreign Policy Examination of competing theories as to the relationship between business and the state in the conduct of foreign policy. The relevance of these theories will be tested vis-a-vis cases of Cold War interventionism, East-West trade, economic sanctions, trade policy, the role of international banking, the arms industry, and the oil companies. *Prerequisite:* Government 215 or permission of the instructor. *Four credit hours*. MR. RODMAN

**338** International Legal Systems A study of several of the world's major legal systems, each having impact and influence well beyond its core society, as those systems have been shaped and operate in particular political/social/economic contexts. Particular attention to the American, English, French, German, and Japanese systems, and to the developing law of the European Community. Attention also to the basic principles of international public law, particularly as they intertwine with developing private law systems. The perspective is that of the individual American professional private entrepreneur, or public official engaged in dealing with counterparts in the respective countries under consideration. *Four credit hours*. MR. MAVRINAC

341 United States Policy Toward the Middle East Primarily through case studies, an overview of the Middle East policy of successive American administrations since 1945,

## 112 GOVERNMENT

emphasizing the motivations and world views that have guided United States policymakers toward the region. Topics include American interests in the Middle East, the origins of the United States involvement in the region, American policy toward the Arab-Israeli conflict and Arab and Iranian nationalisms, the making of the Camp David agreements, the American debacle in Iran, the "special relationship" between the United States and Israel, and the United States response to the Iraqi invasion of Kuwait. *Prerequisite:* Government 259 or permission of the instructor. *Four credit hours*. MR. DENOEUX

342 International Relations of the Middle East An introduction to the international politics of the Middle East since the collapse of the Ottoman Empire and the emergence of a system of nation-states in the Middle East after World War I. The course focuses on the Arab-Israeli conflict (from the late 19th century through the intifada), inter-Arab politics since 1945, the foreign policies of selected Middle Eastern countries, the Iran-Iraq war, and the Gulf War. *Prerequisite:* Government 259 or permission of the instructor. *Four credit hours*. MR. DENOEUX

**344** American Liberalism in Thought and Practice An examination of the changing role of the national government in American society in the twentieth century. Primary focus will be on populism, progressivism, and the civil rights movement; on the broad expansions of government responsibility that occurred during the progressive, New Deal, and Great Society eras; and on the contemporary impacts and problems resulting from this enlargement of the role and size of the federal government. *Prerequisite*: Government 111 or History 124. *Four credit hours*. MR. MACKENZIE AND MR. WEISBROT

**352** The Judicial Process A seminar designed to give a broad survey of the role of law and the courts in our society from the perspective of a State Supreme Court Justice. Topics include the appellate process, judicial activism, etc. Enrollment limited. *Prerequisite:* Government 111 and permission of the chair of the department. *Three credit hours*. MR. BRODY

[354] Advanced Policy Studies A detailed examination of contemporary federal public policy issues. Specific policy problems in the areas of federal budget policy, social welfare policy, and foreign or defense policy will be considered. Special attention to policy innovations and the prospects for major reform. *Prerequisite*: Government 111. *Four credit hours*.

**†[356]** Parties and the Electoral Process An analysis of partisan politics and elections in the United States, emphasizing the role of parties, and dealing with candidates, their staffs, the electorate, and the media. *Prerequisite:* Government 111. *Four credit hours*.

[357] Democracy and Fascism The relationship between democracy and fascism, involving case studies of the governments of Italy, Germany, and France, and the factors that facilitate change from one system to the other. Enrollment limited. *Prerequisite:* Government major or permission of the instructor. *Three or four credit hours*.

358 Contemporary Japanese Politics A survey of the political process in postwar Japan, with emphasis on some of the major institutions of political life. Japan is considered as a political system comparable to those of other industrial democracies, in spite of marked differences in social and cultural values. *Prerequisite:* Government 112 or permission of the instructor. *Four credit hours*. MR. BOWEN

[359] Comparative State Systems A study of the state, using the examples of the state systems of the United States, Japan, and France. The approach is grounded in political economy; central issues to be addressed are the bases of legitimacy, the meanings of social justice, the rights

and obligations of citizens, the powers of bureaucracy, the foundations of law, procedural justice, market morality, and domestic and external constraints on the state's ability to govern. Marxian, liberal, and Weberian critiques will be examined in lecture and seminar format. *Prerequisite:* Government 112 or permission of the instructor(s). *Four credit hours*.

**†[372j]** Soviet Foreign Policy An exploration of the evolution of Soviet foreign policy from Lenin's time until the present. Emphasis on the rapid changes currently taking place in Europe and the possible end of the cold war. Enrollment limited. *Prerequisite*: Permission of the instructor. *Three credit hours*.

**\*373** The American Congress The organization, powers, and actions of the legislative branch of the American government examined in historical and contemporary perspective. Formerly listed as Government 273. *Prerequisite:* Government 111 or permission of the instructor. *Three or four credit hours*. MR. MAISEL

[392] Governing An exploration of the inner workings of government agencies in the United States. Emphasis on decision making on such matters as personnel, budgets, ethics, and affirmative action. Readings and discussions draw heavily on practical cases. Enrollment limited. *Prerequisite:* Government 111. *Four credit hours*.

**412** Seminar on Law and Society The relationship of political ideology, empirical, political, and social change, and the evolution of legal doctrines both in the United States and in other societies. (In 1992 the seminar will deal with the evolution of modern doctrines of civil rights in the context of the development of American national constitutional law.) Enrollment limited. *Prerequisite:* At least one course in political theory and one course in constitutional law and permission of the instructor. *Four credit hours*. MR. MAVRINAC

**413** Seminar in Comparative Politics In 1991 the seminar will focus on the process of democratization of both sides of the rapidly disappearing iron curtain. What does democracy mean? Why has it been hard to establish historically in Western Europe and the Soviet Union? What are the propects for democracy as we head into the next century and millennium? *Prerequisite:* Permission of the instructor. *Four credit hours*. MR. HAUSS

**†[414]** Contemporary Social Theory Developments in twentieth-century interpretation and criticism, with particular attention to existentialism, revisionist Marxism, feminist scholarship, post-structuralism, and post-modernism. Enrollment limited. *Prerequisite:* Permission of the instructor. *Four credit hours*.

**416** Western Intervention in the Non-Western World Geopolitical, historical, ideological, and economic forces affecting United States and Soviet involvement in the political and economic affairs of Third World nation-states. Case studies will include post-World War II instances of intervention and their impact on subsequent efforts at indigenous political development. An attempt will be made to isolate systematically the causes and different forms of intervention before trying to develop a theory of this phenomenon. Enrollment limited. *Prerequisite:* Permission of the instructor. *Four credit hours*. MR. BOWEN

[418] Culture, Technology, and Development in Africa A seminar examining how new and old African technology contributes to development and its implications for public policy. Primary focus is on technologies related to producing clean water, ink and paper, metallurgy, electrification, communication, and innoculation, especially as these concern Kenya. Enrollment limited. *Prerequisite:* Permission of the instructor and/or Government 277. *Four credit hours*.

[432] Seminar on Executive Leadership in the Federal Government A research seminar examining such topics as executive selection, techniques of public management, personnel administration, policy formulation, and public liaison. Enrollment limited. *Prerequisite:* Government 276 or 392 and permission of the instructor. *Four credit hours*.

[433] American Government and the Press The philosophical, ethical, historical, political, and legal relationships between the United States government and the press. Recent case studies, electronic as well as print media, politics, and policymaking. Enrollment limited. *Prerequisite:* Government 111 and permission of the instructor. *Four credit hours*.

**434** Women in American Politics The role of women in contemporary American politics; controversial issues which relate particularly to women, and the ways in which the government addresses those issues. How a social movement becomes a political movement; how social issues become part of the political agenda. Enrollment limited. *Prerequisite:* Government 111 and permission of the instructor. *Four credit hours*. MR. MAISEL

**†[437]** Political Violence, Conflict, and Revolution A seminar examining various explanations of political violence, political conflict, and revolutions. Selected case studies provide the empirical material to assess the validity of different theoretical models and perspectives. Enrollment limited. *Prerequisite:* Government 112. *Four credit hours*.

**438** Seminar in Policy Advocacy Intensive study of selected public policy issues and the techniques of policy advocacy; emphasis on oral presentations of policy positions. Enrollment limited. *Prerequisite:* Government 317 and permission of the instructor. *Four credit hours*. MR. MACKENZIE

**451** The New Deal An examination of the policies and politics of Franklin Roosevelt's New Deal. Major policy initiatives will be reviewed, and the formation of the New Deal electoral coalition assessed. The seminar will also consider the intellectual and historical background of the period, the political leadership of FDR and Eleanor Roosevelt, and the rise of the administrative state. Enrollment limited. *Prerequisite:* Permission of the instructor. *Four credit hours*. MR. CORRADO

**457** United States Foreign Policy Seminar An advanced seminar dealing with major theoretical and policy issues in the study of American foreign policy since World War II. The specific topic of the seminar will be announced each year; possible topics are multinational corporations and foreign policy; Soviet-American relations; levels-of-analysis; and international organization. *Prerequisite:* Government 215 and permission of the instructor. *Four credit hours*. MR. RODMAN

**473d2** Seminar in African Politics Focus on a selected issue relevant to contemporary Africa's problems and future. Enrollment limited. *Prerequisite*: Permission of the instructor. *Four credit hours*. MS. HAWK

[477] Seminar in East Asian Politics A focus on the demise of Japanese democracy in the 1930s and the rise of Japanese fascism, studied comparatively with similar developments in Germany and Italy. The empirical basis of the course will be augmented by a study of democratic and fascist theories, most particularly the relationship between liberal democracy and fascist ideologies in a nationalistic context. Enrollment limited. *Prerequisite:* Permission of the instructor. *Four credit hours*.

[479] Lives in Politics Readings and discussions of the biographer's art and its value in analyzing public affairs. Students will read classical and contemporary political biographies and meet with biographers. *Prerequisite:* Permission of the instructor; priority to senior government majors. *Four credit hours*.

483, 483j, 484 Honors Workshop Individual and group meetings of seniors and faculty participating in government honors program. *Prerequisite:* Permission of the department. 483: two credit hours; 483j: three credit hours; 484: four credit hours. FACULTY

**491,492** Independent Study A study of government through individual projects. *Prerequisite:* Government major and permission of the department chair and instructor. *One to four credit hours*. FACULTY

**493** Public Policy Seminar Listed as Public Policy 493 (q.v.). Three credit hours. MR. MACKENZIE

# Greek

In the Department of Classics.

111, 111j Introductory Greek Introduction to Homeric Greek. Four credit hours. MRS. KOONCE

112 Intermediate Greek Readings in Homer's Iliad. Four credit hours. MRS. KOONCE

131 Introduction to Greek Literature The Odyssey or the Iliad of Homer. Successful completion of this course fulfills the College language requirement. Prerequisite: Greek 112. Four credit hours. MRS. ROISMAN

232 Attic Prose Readings in Herodotus. Three or four credit hours. MRS. KOONCE

[351] Greek Literature Thucydides. Three or four credit hours.

352 Greek Literature Sophocles. Three or four credit hours. MRS. KOONCE

[353] Greek Literature Demosthenes. Three or four credit hours.

354d1 Attic Poetry Euripides. Three or four credit hours. MRS. KOONCE

[355] Greek Literature Herodotus. Three or four credit hours.

[356] Greek Literature Plato. Three or four credit hours.

[414] Seminar Attic orators. Three or four credit hours.

**491, 492** Independent Study Reading in a field of the student's interest, with essays and conferences. One to three credit hours. FACULTY

[493] Seminar Aeschylus. Three or four credit hours.

# History

Chair, PROFESSOR ROBERT WEISBROT

Professors K. Frederick Gillum, Harold Raymond<sup>1</sup>, Richard Moss<sup>2</sup>, Weisbrot, and Lee Feigon; Associate Professor Marilyn Mavrinac<sup>3</sup>; Assistant Professors Lindsay Wilson<sup>4</sup> and James Webb<sup>2</sup>; Visiting Assistant Professors David Das and Thomas Carson; Instructor Rosaleen Salvo

History provides the opportunity to expand an understanding of the human experience through the study of one's own and other cultures and societies as they have evolved through time. It is also a rigorous intellectual discipline involving research techniques, problem solving, and the critical evaluation of evidence. The department offers a wide variety of learning experiences, including lectures, individual tutorials, discussion groups, and research seminars. Students are encouraged to take courses in manyareas of history and in interdisciplinary programs and related fields. While a number of distinguished academic historians began their training at Colby, most majors find that history is excellent preparation for careers in business, law, and other professions. In recent years, media research, preservation, and museums have offered new opportunities for persons trained in history.

Requirements for the Major in History

Twelve semester courses in history: at least two courses in two of the following three areas: United States, European, and non-Western history; at least one course in the third area; History 218 or 252. When a student presents two courses in a selected area, at least one must be at the 200 level or higher. One of the courses in European history must be before 1800; one of those in American history must be before 1860. Two of the twelve courses counting toward the major may be selected from courses in related fields subject to approval by the department.

All majors must satisfy a comprehensive requirement either by taking a designated senior seminar or by a satisfactory oral presentation on a topic in the student's field of concentration in history.

Details on the division of courses among the fields and on the comprehensive requirement are available at the department office.

Majors in history may apply during their junior year for selection for admission to the department honors program. On successful completion of the work of the honors program and of the major, their graduation from the College will be noted as being "With Honors in History."

The point scale for retention of the major applies to all courses in history. No requirement for the major may be taken satisfactory/unsatisfactory.

Attention is called to the interdisciplinary minor in quantitative analysis.

<sup>1</sup>Reduced-time. <sup>2</sup>On leave full year. <sup>3</sup>Joint appointment in history and education; part-time. <sup>4</sup>On leave first semester.

117 Topics in Ancient History: Greek History Listed as Ancient History 177 (q.v.). Four credit hours. MR. ROISMAN

118 Topics in Ancient History: Roman History Listed as Ancient History 154 (q.v.). Thre or four credit hours. MR. CLUETT

**123, 124** Survey of United States History United States history from the age of discovery to the present. Although chronological symmetry is maintained, an effort is made to demonstrate the particular value of political, economic, and constitutional interpretations. *Four credit hours*. MS. SALVO AND MR. WEISBROT

131 European Cultural History before 1815 An examination of major themes, periods, and methods in the cultural and social history of Europe from ancient Greece through the French Revolution. Significant works of literature, philosophy, political theory, art, and music will be examined in the context of major developments in society and the state. Four credit hours. MR. CARSON

132 European Cultural History since 1815 An examination of significant developments in European society and culture from 1815 to the present. Topics based on the themes of Enlightenment and Revolution include romanticism, nationalism, liberalism, socialism, fascism, and feminism. Readings from Marx, Darwin, Freud, and de Beauvoir. Four credit hours. MS. WILSON

133 Europe Since 1648 An introduction to the basic issues and events of European history since the middle of the seventeenth century. *Four credit hours*. MR. CARSON

139j Athens, Rome, and Jerusalem Listed as Classics 139j (q.v.). Two or three credit hours. MR. ROISMAN

**151, 152** Self, State, and Society in East Asia Listed as East Asian Studies 151, 152 (q.v.). Four credit hours. MR. FEIGON AND MR. GANZA

[153] Western Africa and the Atlantic World An introduction to major themes in western African history and in the continent's relationship to the wider Atlantic world. Topics include Islam in Africa, precolonial African states, the slave trades, the South Atlantic system, the commercial revolution, and European colonialism. *Four credit hours*.

[154] Eastern and Southern Africa and the Indian Ocean World An introduction to major themes in eastern and southern African history and in the continent's relationship to the wider Indian Ocean world. Topics include precolonial political culture, Arab and Indian diasporas, the slave trades, European colonialism, the problem of underdevelopment, and apartheid. *Four credit hours*.

211j Public Lives/Private Lives: Men and Women in Europe from the Middle Ages to the Present An examination of the effects of gender and historical situation on individuals' values, experiences, and expectations from birth to death. The lives of a number of ordinary and extraordinary people—students, workers, reformers, philosophers, kings, and saints—will be studied against the backdrop of significant events or periods in European history. Three credit hours. MS. WILSON

**215** America and Asia: Attitudes and Relationships A history of United States attitudes and relations with Asian countries, principally China and Japan, particularly as manifested in such episodes as the opium wars, the anti-Oriental exclusion laws, the open-door policy, the Pacific side of World War II, the Korean War, the war in Vietnam, and present-day U.S.-China and U.S.-Japan relations. The American view of East Asia will be compared with other accounts of life in the region. *Four credit hours*. MR. FEIGON

**†[216]** The Chinese Revolution Modern China, concentrating on the massive upheavals that have shaped her history in the past century, from the Taiping Rebellion of 1850–1864 to the death of Mao. Four credit hours.

[217j] The Administration of John F. Kennedy A case study in presidential leadership. Three credit hours.

[218] Recreating the Past Methods of interpreting the record of past events; focusing on the works of professional historians, and including novelists and others who have contributed to the understanding of history. Three or four credit hours.

[231] Medieval History, 500–1300 A survey of the society and culture of the Middle Ages. Topics include feudalism, monasticism, the proprietary church system, the agricultural revolution, the Crusades, the rise of national monarchies and the struggles between church and state, scholasticism, troubadour poetry, and Gothic cathedrals. *Four credit hours*.

**†[232] Renaissance and Reformation, 1300–1600** A survey of the movements for ethical, political, and religious reform in Europe and their impact on the family, the church, and the state. Topics include humanism, the rise of capitalism, art and patronage, education and printing, the search for utopias, and the realities of social disorder and political conflict. *Three or four credit hours*.

233 Comparative World History, 1400–1800 A comparative examination of processes of historical change in Africa, South America, North America, Australia, and Eurasia. Topics include patterns of global ecological change, colonization and overseas trade, slavery in world history, and social change and resistance. Designed to provide solid, historical knowledge of the world beyond the West and to put historical knowledge of the West into comparative perspective. *Four credit hours*. MR. DAS

**234** Comparative World History, 1800–1960 A sequel to History 233. Topics include European colonial empires, systems of forced labor, the phenomenon of secondary empire, the evolution of the global economy, and anti-colonial struggles for independence. *Four credit hours*. MR. DAS

**236d1** History of Women in Europe European gender roles and women's experiences from the mid-nineteenth century through the second world war: interaction of industrialization, wars, and reform movements with women's evolving legal and social positions. Focus on France and Britain. *Four credit hours*. MS. MAVRINAC

[237] The Emergence of Modern Britain, 1688–1867 Political, economic, and intellectual history of Britain from the "Glorious Revolution" through the Age of Reason, the American, French, and Industrial Revolutions, the Napoleonic Wars, Romanticism, and the building of the British Empire. *Four credit hours*.

[238] Modern Britain, 1867–1990 Britain from the nineteenth-century "Pax Britannica" of Palmerston, Disraeli, and Gladstone through two world wars, Socialism, and the loss of the Empire to the age of "Thatcherism." *Four credit hours*.

[251] East Central Europe A rapid historical survey of the peoples living on the territories of present day Czechoslovakia, Poland, Hungary, Romania, and the Balkan Peninsula from the earliest time to the present. Topics include the rise and demise of the Habsburg and Ottoman Empires, the Polish-Lithuanian Commonwealth and its partitions, nationalist and socialist movements, nation-building, Sovietization, dissident movements, and the recent revolutions. *Four credit hours*.

**252** Introduction to History This course is divided into three units: the first introduces students to history's history and philosophical problems; the second explores the nature of historical disputes with emphasis on the nature of historical evidence and its use; the third introduces the problems of doing original research in history. *Four credit hours*. MS. HRONEK

[254] Comparative Communism An examination of Marxist theory and the reality of the two main states calling themselves Marxist—the Soviet Union and the People's Republic of China. Four credit hours.

**257** History of Women in America A survey of the evolution of female gender roles from the colonial era to the present. The course focuses on the impact of political, economic, and social change on women's possibilities and treats the history of feminism as well as constructs of femininity. Reading in primary documents and secondary literature. *Four credit hours*. MS. HRONEK

[259] Modern France An introductory survey of the paradoxes in French society from the mid-nineteenth century to de Gaulle's regime in the Fifth Republic. The drama of conflict between conservative groups and radicals is studied in the context of persistent nationalism, cultural imperialism, and economic modernization. *Four credit hours*.

261, 262 Russian History, from Early Times to the Present The first semester of this survey emphasizes social, political, and cultural trends in the imperial period. The second term covers social, political, and cultural trends in the revolutionary and Soviet periods. Several films will be used. *Four credit hours*. MR. DAS

[272] War and Revolution in Vietnam Listed as Government 271 (q.v.). Three or four credit hours.

[278] African-American History: From Slavery to Freedom A study of black experience in America, focusing on the nature of racism, the experience of slavery, the role of African Americans in shaping the nation's history, and the struggle for equality from colonial times until the present. Four credit hours.

[294] The Use of the Computer in Historical Studies An introduction to the computer for historical research. Group projects, using nineteenth-century United States census surveys, French arrest and British parliamentary records, provide "hands-on" experience. Data analysis and critiques of quantitative history writings are included. Three or four credit hours.

**295j** Internship in History Internships in museums, historical restoration, historical societies, and preservation centers. Nongraded, credit or no entry. *Prerequisite*: Permission of the instructor. *Zero to three credit hours*. FACULTY

[311j] Tutorial in History Individual or small group sessions, with emphasis on research methods, especially for juniors. Enrollment limited. *Prerequisite:* Permission of the instructor. *Three credit hours*.

[312] The Atlantic Revolutions A comparative evaluation of the origins, stages of development, and significance of the French and American revolutions from circa 1750 to 1815; theories of revolution and historiography of the "Atlantic" revolutions. Prerequisite: Permission of the instructor. Three or four credit hours.

[314] Right-Wing Nationalism and Fascism A theoretical and empirical exploration of right-wing movements in twentieth-century Europe; different theories of fascism, and case studies of German, Italian, and other fascist movements in Eastern and Western Europe. Several films will be used. Four credit hours.

### 120 HISTORY

**315** The Era of the First World War How the unification of Germany, the alliance systems, and Balkan rivalries led Europe and the United States into a total war without great heroes or generals. Why the idealism of the "War to End Wars" failed to create an era of lasting peace. Four credit hours. MR. GILLUM

**316** The Era of the Second World War Why the search for peace failed in the 1920s and 1930s, and why German aggression in Austria, Czechoslovakia, and Poland brought a "resumption" of war in 1939. The "American neutrality" debate and the Asian problems which led to Pearl Harbor in 1941. The policies of genocide in Eastern Europe, and the beginnings of the "Cold War" era for the United States and the Soviets in Europe and in Southeast Asia. *Four credit hours*. MR. GILLUM

**†[317]** The Introduction of Marxism into China The development of Marxist ideology in Europe interwoven with the history of the evolution of Chinese thought and society in the late nineteenth and early twentieth centuries as a result of the impact of Western imperialism. The origin of the Chinese environment into which Marxist thought was received and transformed and the impact of Marxist ideas on China through the early 1930s. Four credit hours.

**†[318]** The People's Republic of China The development of Chinese Communist theories and practice since 1949 and their relation to socialist ideas and activities in other countries. Special emphasis will be placed on the socioeconomic background in China within which Maoist theory developed, particularly on the problems involved in attempting to bring about a socialist reorganization of state and society while engaged in industrial development. Four credit hours.

[319] Economic History of Twentieth-Century Africa A seminar on the evolution of African economies in the twentieth century; topics include the commercial revolution, colonial and post-colonial policy, urbanization, food crisis, and international aid. Designed to provide a solid historical foundation for understanding contemporary problems. Four credit hours.

[321j] African Voices in African History A seminar on the history of twentieth-century Africa. Readings of memoirs, short stories, and novels by African authors. Designed to provide an introduction to the variety of African experiences, responses, and perspectives on social and political change during the colonial and post-colonial periods. *Two credit hours*.

**†**[331] Women, the Family, and the State in Europe, 400 B.C.–1850 A.D. A survey of ideas about women, the family, and the state expressed by prominent social thinkers from Plato to Darwin and their critics. Exploring the question of how Christianity, revolutionary rhetoric, and science supported or challenged prevailing attitudes and mores regarding the nature and place of the sexes; the relationship between ideas about gender and the reality of women's lives from classical Greece to the Industrial Revolution. *Prerequisite*: History 131 or 132 or permission of the instructor. *Three or four credit hours*.

[333] Medieval England A political survey of English history in the Saxon, Norman, Angevin, Lancastrian, and Yorkist periods. *Four credit hours*.

[334j] Crisis and Reform: The 1960s The Utopian hopes for government during the Kennedy and Johnson years, both in solving social problems and in containing Communism around the world. Readings focus on the shaping of federal policies, their domestic and global impact, and the cultural and political legacy of this era. Three or four credit hours.

**335d2** Tudor-Stuart England The contest of religious doctrines and the conflict of political concepts, from the Renaissance despotisms of Henry VII, Henry VIII, and Elizabeth to the Stuart rulers, the English Civil Wars, the "reign" of Oliver Cromwell, and the "Glorious Revolution" of 1688. Four credit hours. INSTRUCTOR

**†[338]** A Constitutional and Legal History of Medieval England English governmental and legal principles in the Saxon period, in the time of Henry II, and in the thirteenth century. Developments since 1307 will be considered briefly. *Four credit hours*.

[343A] Topics in History: Varieties of Antisemitism An examination of the adverse relationship between the gentile and Jewish communities in different European countries, including Germany and Russia, in the modern and contemporary period. Enrollment limited. Four credit hours.

**344A** Images of Black and White: Southern Women from the Civil War to Civil Rights The vision of southern culture, as seen through the eyes of women, from the days of slavery to the social and political activism of the civil rights movement. Using the writings and oral testimonies of black and white women, the course will examine the social, cultural, and political issues and events that shaped the lives of southern women. *Four credit hours*. MS. HRONEK

**344B** American Liberalism in Thought and Practice Listed as Government 344 (q.v.). Prerequisite: Government 111 or History 124. Four credit hours. MR. MACKENZIE AND MR. WEISBROT

[351] France in the Age of Absolutism and Enlightenment A close look at society, politics, science, and culture in early modern France; the weight of tradition measured against the need for reform. Readings include works by Richelieu, Descartes, and Voltaire, as well as first-hand accounts of popular revolts, the witch-craze, and life among the less privileged; computer simulation of prospects for social mobility in the world of Louis XIV. *Three or four credit hours*.

[353] American Culture and Society, 1865–1975 The development of modern American culture from the Gilded Age to the "Me" decade, from the Civil War to Vietnam. Social change and the evolving meaning of work, leisure, the individual, and the social experiment as reflected in literature, film, music, and art. *Three or four credit hours*.

[355] The French Revolution and Napoleon The origins and political and social development of the French Revolution and Napoleonic dictatorship, 1789–1815. This period of French and European history will be compared to other revolutions. *Four credit hours*.

**357** Modern Germany The German response to the French Revolution of 1789, the establishment of the German Empire by Bismarck, the German defeat in World War I, the Weimar period, the Nazi era, World War II defeat and partition, and an analysis of Germany's 1990 unification. Four credit hours. MR. GILLUM

**366** Alexander the Great Listed as Ancient History 356 (q.v.). Three or four credit hours. MR. ROISMAN

**371** War and Revolution in Vietnam See description for History 272 and Government 271. Students who have earned credit for either of these courses cannot take this course. Four credit hours. MR. WEISBROT

## 122 HISTORY

**372** The American Civil War The Civil War and its military and political history from about 1860 to 1865. Four credit hours. MR. RAYMOND

[376] America: The New World, 1607–1783 The American colonies from their earliest settlement to the Revolution; the emergence of a unique American society and mind from the Puritans to George Washington. Three or four credit hours.

**377** The Coming of the Civil War An examination of American history from 1840 to 1861, focusing on the breakdown of the American federal democracy and the causes of the Civil War. Consideration of alternative explanations put forward by contemporaries and by later historians. *Prerequisite:* A course in American history or permission of the instructor. *Four credit hours*. MR. RAYMOND

[378] The United States, 1783–1860 The problems of the new nation, including the Constitution, geographical expansion, religious revivalism, reform, democracy, slavery, and sectionalism. Three or four credit hours.

**393** American Cultural History, 1600–1865 American life from the founding to the Civil War as seen from a social and intellectual perspective. Emphasis on the growth of a unique American mind and its relationship to new world social and political development. *Three credit hours*. MS. SALVO

[415] Seminar in American History: 1960s An exploration of the 1960s as a historical problem. *Prerequisite*: Permission of the instructor. *Four credit hours*.

415 Seminar in American History: 1920s An exploration of the major issues of the 1920s in the United States. An independent research project is required. *Prerequisite*: Permission of the instructor. *Four credit hours*. MS. HRONEK

419d2 Topics in History: Women, Law, and Medicine in Early Modern Europe—The Witchcraze An examination of the witch craze in sixteenth-century Italy, France, Switzerland, and Scotland, and of the broader issues which it raises regarding women's status in the family, the community, the economy, the church, and the law courts of early modern Europe. Enrollment limited. Formerly listed as History 344. Four credit hours. MS. WILSON

**432** Seminar in African-American History "Black Thought and Leadership." An intensive examination of selected leaders in African-American history, focusing on civil rights ativists and black nationalists of the past century; biographies and writings of W.E.B. DuBois, Marcus Garvey, Martin Luther King, and Malcolm X, among others. *Prerequisite*: Permission of the instructor. *Four credit hours*. MR. WEISBROT

**458** Seminar in Modern Chinese History Listed as East Asian Cultures and Languages 458 (q.v.). Prerequisite: Permission of the instructor. Four credit hours. MR. FEIGON

**472** Seminar in Russian and East European History: The Intelligentsia Intensive study of intelligentsia responses to the political and social conditions of their societies. Topics include the Slavophile-Westernizer controversy, populist movements, Marxist trends, women of the intelligentsia, Soviet and East European dissidents. *Prerequisite*: Permission of the instructor. *Four credit hours*. INSTRUCTOR

483, 484 History Honors Program Majors may apply late in their junior year for admission

into the History Honors Program. These courses require research conducted under the guidance of a faculty member and focused on an approved topic leading to the writing of a thesis. Upon successful completion of the thesis and the major, the student will graduate "With Honors in History." Enrollment limited. *Prerequisite:* Senior standing and a 3.0 grade point average in the history major at the end of the junior year. *Three credit hours*. FACULTY

**491, 492** Independent Study A study of history through individual projects. Prerequisite: Permission of the instructor. One to four credit hours. FACULTY

[493] The Holocaust An examination of the Holocaust through literary and historical approaches, drawing on both primary and secondary sources, exploring the facts of the Holocaust, and confronting the moral and philosophical challenges posed by the event. *Prerequisite:* Permission of the instructor. *Four credit hours*.

[498] Bunche Honors Seminar The course examines issues of race relations, civil rights, and diversity, with special reference to the life and legacy of Ralph J. Bunche, a twentiethcentury activist, scholar, and diplomat. Readings include such subjects as civil disobedience, the "Black Power" movements, and affirmative action. *Prerequisite:* Permission of the instructor. *Four credit hours*.

# International Studies

#### Director, PROFESSOR KENNETH RODMAN

ADVISORY COMMITTEE: Professors Sylvia Bermudez (Romance Languages and Literature), Patrice Franko-Jones (Economics and International Studies), Charles Hauss (Government), David Nugent (Sociology and Anthropology), Tamae Prindle (East Asian Cultures and Languages), Rodman (Government), and James Webb (History)

### Requirements for the Major in International Studies

A total of thirteen courses, including five courses from the Core Curriculum; three courses in Area Studies; three courses from Policy Studies; one senior seminar or appropriate independent study. Majors must also satisfy a language requirement: the equivalent of one course beyond the 127 level in a modern foreign language. To the extent to which it is practicable, students are encouraged to develop language skills relevant to their area concentration. At least one semester of foreign study is required; students with significant overseas experience can petition the director and the advisory committee to be exempted.

An Honors Program is available in which the student can pursue a year-long independent research project which may be substituted for the seminar requirement; successful completion of this project may entitle the student to graduate "With Honors in International Studies."

### Courses Composing the Core Curriculum:

Economics 133 and 134, Anthropology 112, Government 215, and either History 233 or 234. Courses Approved to Fulfill the Area Studies Component:

Note that (a) two courses must be drawn from the same region, and (b) courses must be drawn from at least two disciplines.

### Latin America:

Anthropology: 234 Latin American Culture and Society.

Economics: 213 Brazilian Economy and the Environment, 214 Latin American Political Economy.

Spanish: 216 Voiceless Voices: The "Other" in Spanish America, 232 Spanish-American Culture.

Any Latin American literature, culture, or civilization course above the 200 level.

# Western Europe:

Economics: 272 European Economic History.

French: 232 Introduction to French Culture.

*German*: 232 Survey of German Culture, 233 Introduction to Contemporary German Culture. *Government*: 233 European Politics, 374 French Politics.

History: 111 Introduction to the Cultural History of Europe, 212 Cultural History of Modern Europe, 236 History of Women in Europe, 238 Modern Britain, 259 Modern France, 314 Right-Wing Nationalism and Fascism, 315 The First World War and the Crisis of European Society, 355 The French Revolution, 357 Modern Germany.

*Religious Studies*: 215, 216 The Heritage of Western Religion, 259 The Catholic Church in the Modern World.

Any European culture, literature, or civilization course above the 200 level.

## Russia and Eastern Europe:

Government: 253 Soviet Politics, 372 Soviet Foreign Policy.

History: 251 East Central Europe, 261, 262 Russian History, 343 Varieties of Anti-Semitism. Russian: 237, 238 Russian Literature.

## Africa:

English: 438 African Literature.

Government: 277 African Politics.

History: 153 Western Africa and the Atlantic World, 154 Eastern and Southern Africa and the Indian Ocean World, 319 Economic History of Twentieth Century Africa, 321 j African Voices in African History.

## The Middle East:

Government: 258j The Israeli-Palestinian Conflict, 259 Politics of the Middle East, 342 International Relations of the Middle East.

Religious Studies: 253 The Middle East, 254 Islam and the Modern World.

Asia:

Anthropology: 232 Pacific Islands Culture.

East Asian Cultures and Languages: 151, 152 Self, State, and Society in East Asia, 271 Japanese Women in Film and Literature, 332 Money and Society in Japanese Literature.

Government: 237 Political Development in Modern Japan, 271 War and Revolution in Vietnam, 358 Contemporary Japanese Politics.

*History*: 215 America and Asia, 216 The Chinese Revolution, 317 The Introduction of Marxism into China, 318 The People's Republic of China.

Philosophy: 255, 256 Indian Thought.

Religious Studies: 117 Passage to India, 211 Religions of India, 212 Religions of China and Japan, 213 Contemporary Asian Ideas and Values, 218 Buddhist Literature, 314 Religion in Modern Asia, 315 Zen Buddhism, 317 Sikhism.

Courses Approved to Fulfill the Policy Studies Component:

Anthropology: 252 Hunger, Poverty, and Population, 316 Peasant Society and Rural Rebellion. Economics: 275 Comparative Economic Systems, 276j Marxian Economics, 277 International Finance, 278 International Trade, 293 Economic Development, 373 International Economics. Government: 231 Race and Ethnicity in Comparative Perspective, 252 United States Foreign Policy, 257 The United States and the Third World, 239 The Nuclear Age, 332 Political Development in the Third World, 334 North/South Relations, 336 International Organization, 337 Business and American Foreign Policy, 341 United States Policy toward the Middle East, 342 International Relations of the Middle East, 372 Soviet Foreign Policy.

History: 215 America and Asia, 233, 234 Comparative World History (if not used to satisfy the core curriculum), 319 Economic History of Twentieth Century Africa, 316 The Second World War.

Science-Technology Studies: 393 Seminar in Science and Technology Studies.

#### Courses Approved to Fulfill the Seminar Requirement:

East Asian Cultures and Languages: 458 Seminar in Modern Chinese History.

Economics: 493 Senior Seminar (if topic is appropriate).

Government: 413 Seminar in Comparative Politics, 416 Western Intervention in the Non-Western World, 418 Culture, Technology, and Development in Africa, 437 Political Violence, Conflict, and Revolution, 457 United States Foreign Policy Seminar, 473 Seminar in African Politics, 476 Seminar in East Asian Politics.

History: 472 Seminar in Russian and East European History.

*Note:* Some courses are listed in both Policy and Area studies; no single course can be used to satisfy more than one requirement. Students may petition to include other courses if the course has a substantial international component and is approved by the director and advisory committee.

**483, 484** Honors in International Studies A year-long research project for senior majors, resulting in a written thesis to be publicly presented and defended. *Prerequisite:* A 3.25 grade point average and permission of the advisory committee. *Four credit hours*. FACULTY

**491, 492 Independent Study** An independent study project devoted to a topic chosen by the student with the approval of an adviser. A four-credit independent study can be substituted for the senior seminar requirement. *Two or four credit hours*. FACULTY

# Italian

In the Department of Romance Languages and Literature.

125, 126 Elementary Italian Introduction to the language, with emphasis on understanding, speaking, and reading. Use of taped materials in the language laboratory is a regular part of the class work. Italian 125 is prerequisite for 126. Four credit hours. MR. FERGUSON

**127** Intermediate Italian Intensive review of the fundamentals of the language. Practice in the oral-aural skills, supplemented by work in the language laboratory and composition, all based on a variety of modern readings. *Prerequisite:* Italian 126 or permission of the instructor. *Four credit hours*. MR. FERGUSON

# January Program

002j Emergency Medical Technician Training Intensive training in basic techniques practiced in emergency medicine. Theory and practical exercises given in conjunction with Kennebec Valley Technical College. Course includes the basic 100-hour program plus certification in basic CPR, and requires at least 10 hours of clinical observation in a hospital emergency department. Upon completion of the course, which includes examinations, it is possible to be certified as a State of Maine and/or National Registry EMT. Enrollment limited. Priority to students who agree to participate in at least two semesters of on-call experience with Colby Emergency Response. A fee to cover materials and licensing exam will be established. *Prerequisite:* Permission of the faculty sponsor. *Noncredit.* MR. HUME

006j Woodworking The intent of this January program is to stimulate personal development in the field of crafts as part of a well-rounded education in the hope that the habits, skills, and carpentry developed during such a program would be carried on throughout the student's lifetime. With emphasis on shop safety and the knowledge of using and caring for hand tools, students will create useful furniture and small items of wood. Several volunteer instructors will share particular skills. Enrollment limited. A fee to cover materials and supplies will be established. *Prerequisite:* Permission of the faculty sponsor. *Noncredit.* MR. HUME

**113j** Society Under the Influence Following a history and definition of the problem of alcohol use, the course will provide a comprehensive view of alcohol and its effects on individuals and today's society. *Prerequisite:* Permission of the instructor. *One credit hour*. MS. MCPHETRES-MAISEL

**291j** Individual Projects Each department and interdisciplinary major sponsors a number of individual January program projects, primarily for majors, to be offered under the appropriate subject heading. At the time of registration the student and sponsor will determine if the project is to be graded or nongraded, and if it is to be for credit or noncredit. The number of credits possible varies with department or program. *Prerequisite*: Permission of the sponsor. *Two or three credit hours or noncredit.* FACULTY

Other January Programs Most courses to be offered in January are listed with the regular semester offerings of each department or program. A "j" following the course number indicates a January Program course. A complete list of offerings will be available in the January Program Course List, issued in October when students elect a course for the January term. Enrollment is limited to 30 or fewer students in nearly all courses. First-year students have priority in all 100-level courses unless otherwise indicated in the Course List.

# Japanese

In the Department of East Asian Cultures and Languages.

Associate Professor Tamae Prindle; Visiting Instructor Noriko Katagiri A minor in Japanese is offered for students who have a substantial interest in Japanese language and culture.

Requirements for the Minor in Japanese

Japanese 125, 126, 127, 128, 321, and one elective course in Japanese studies/culture selected from East Asian Cultures and Languages 232, 271, 332, Government 237, 358, or from other courses identified with an adviser in Japanese.

125, [125j], 126 Elementary Japanese Introduction to the spoken and written language, to provide a thorough grounding in all the language skills: speaking listening, reading, and writing. Japanese 125 is prerequisite for 126. *Five credit hours (three credit hours in January)*. MS. PRINDLE

127, 128 Intermediate Japanese A continuation of the methods and goals used in elementary Japanese. *Prerequisite*: Japanese 126; Japanese 127 is prerequisite for 128. *Four credit hours*. MS. KATAGIRI

**321, 322** Third-Year Japanese Advanced readings in Japanese. Designed primarily for those students who have had substantial experience in a Japanese-speaking setting. *Prerequisite*: Japanese 128 or permission of the instructor; Japanese 321 is prerequisite for 322. *Three or four credit hours*. MS. KATAGIRI

421, 422 Fourth-Year Japanese Further readings and writing in Japanese and use of current

audio-visual materials. Prerequisite: Japanese 322 or permission of the instructor; Japanese 421 is prerequisite for 422. Three or four credit hours. MS. PRINDLE

491, 492 Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. *Two to four credit hours*. FACULTY

# Latin

#### In the Department of Classics.

111 Intensive Elementary Latin An intensive course in Latin grammar and syntax. Four credit hours. MR. CLUETT

**112 Intensive Intermediate Latin** Latin grammar and syntax. Four credit hours. MR. CLUETT

131 Introduction to Latin Literature Selected readings. Successful completion of this course fulfills the College language requirement. *Prerequisite:* Latin 112 or permission of the instructor. *Four credit hours*. MRS. KOONCE

[232] Introduction to Latin Poetry Readings in Terence. Prerequisite: Latin 112 or permission of the instructor. Three or four credit hours.

- [251] Latin Literature Roman drama. Three or four credit hours.
- [351] Latin Literature Lucretius. Three or four credit hours.
- [352] Latin Literature Livy. Three or four credit hours.
- [353] Latin Literature Roman elegy and lyrics. Three or four credit hours.
- [354] Latin Literature Cicero: selected speeches. Three or four credit hours.
- [355] Latin Literature Roman satire. Three or four credit hours.
- 356d1 Latin Literature Cicero: letters. Three or four credit hours. MR. CLUETT
- [357] Latin Literature Horace: Odes and Ars Poetica. Three or four credit hours.
- [358] Latin Literature Tacitus. Three or four credit hours.
- 359d2 Latin Literature Virgil: Aeneid. Three or four credit hours. MR. CLUETT
- [371] Latin Literature Terence. Three or four credit hours.

**491, 492** Independent Study Reading in a field of the student's interest, with essays and conferences. One to three credit hours by prior arrangement. FACULTY

[494] Seminar Virgil: Aeneid. Three or four credit hours.

# Legal Studies

#### Director, PROFESSOR ALBERT MAVRINAC

ADVISORY COMMITTEE: Professors William Cotter (Government), Frederick Gillum (History), Sandy Maisel (Government), Mavrinac (Government), Robert McArthur (Philosophy), James Meehan (Economics), Sonya Rose (Sociology), and Thomas Tietenberg (Economics)

The Legal Studies Program consists of a selection of courses that examine the law and the legal process from diverse disciplinary perspectives. In the tradition of the liberal arts, these courses focus on the law as it relates to other areas of knowledge. The program is designed particularly for the student who is not planning to go to law school and is specifically not part of a pre-law curriculum. Courses range from those dealing with such specialized areas of the law as constitutional, international, and business, to those which examine the law in the broader perspectives of economic thought or moral philosophy. Some courses focus on the Anglo-American common law, while others use comparative techniques to gain insights into the legal systems of other societies with different legal traditions. The professors in these courses come from many disciplines and are all active in research, writing, or consulting on legal matters or related subjects.

Students who are interested in attending law school should consult the committee on professional preparation for law and government service, and should avoid overconcentration on law-related courses as undergraduates.

Courses Offered in the Legal Studies Program Administrative Science: 354 Law.

*Economics*: 312 Topics in Law and Economics; 331 Industrial Organizations and Antitrust Economics; 332 Regulated Industries.

Government: 313 American Constitutional Law I; 314 American Constitutional Law II; 319 Law and Social Change: Women and Minorities; 412 Seminar on Law and Society.

History: 338 A Constitutional and Legal History of Medieval England.

Philosophy: 118 Central Philosophical Issues: Philosophy of Law.

# Literature in Translation

Offered by the departments of Classics, East Asian Cultures and Languages, English, German and Russian, and Romance Languages and Literature.

**133** Greek Myth and Literature Listed as Classics 133 (q.v.). Three or four credit hours. MRS. ROISMAN

[177] Topics in Classics Listed as Classics 177 (q.v.). Two or three credit hours.

[178] Topics in Classics Listed as Classics 178 (q.v.). Two or three credit hours.

[231] Literature of China in Translation Listed as East Asian Cultures and Languages 231 (q.v.). Four credit hours.

232 Greek Tragedy Listed as Classics 232 (q.v.). Three or four credit hours. MRS. ROISMAN

**†[233]** Topics in Russian Literature: Dostoevsky Listed as Russian 231 (q.v.). Four credit hours.

**†[234]** The Heroic Ideal in Early Greek Poetry Listed as Classics 234 (q.v.). Three or four credit hours.

**236** Literature of Japan in Translation Listed as East Asian Cultures and Languages 232 (q.v.). Four credit hours. MS. PRINDLE

[237], 238 Russian Literature in Translation I, II Listed as Russian 237, 238 (q.v.). Three or four credit hours. MS. MCCARTHY

[239] Topics in Russian Literature Listed as Russian 232 (q.v.). Four credit hours.

[252] Hell on Earth: Chinese Writers on Chinese Society Listed as East Asian Cultures and Languages 252 (q.v.). Three or four credit hours.

[271] Japanese Women through Films and Literature Listed as East Asian Cultures and Languages 271 (q.v.). Four credit hours.

**327** The Development of Dramatic Art Listed as English 327 (q.v.). Three or four credit hours. MR. KOONCE

**329** Studies in Modern Drama Listed as English 332 (q.v.). Three or four credit hours. MR. KOONCE

[331] Images of Women in French Literature Listed as French 331 (q.v.). Four credit hours.

[332] Money and Society in Japanese Literature Listed as East Asian Cultures and Languages 332 (q.v.). Four credit hours.

[421] The Literature of Existentialism Listed as English 421 (q.v.). Three or four credit hours.

# **Mathematics**

In the Department of Mathematics and Computer Science.

Chair, PROFESSOR KEITH DEVLIN

Professors Devlin and Homer Hayslett; Associate Professors Dale Skrien<sup>1</sup> and Donald Small<sup>2</sup>; Assistant Professors Carol Bassett<sup>3</sup>, Dexter Whittinghill, Benjamin Mathes, James Northrup<sup>1</sup>, Robert Fisch<sup>1</sup>, Batya Friedman, and Fernando Gouvea; Visiting Assistant Professor Amy Boyd<sup>3</sup>

The Department of Mathematics and Computer Science offers courses in mathematics, statistics, and computer science (see listings under "Computer Science") for students who: (1) plan a career in an area of pure or applied mathematics or computer science; (2) need mathematics as support for their chosen major; or (3) elect to take mathematics as part of their liberal arts education or to partially fulfill the science requirement.

There are four degree programs: a major in mathematics, a major in mathematics with a concentration in computer science, a minor in mathematics, and a minor in computer science. For details concerning the minor in computer science, see under "Computer Science." It is not possible to take the mathematics major both with a concentration in computer science and a minor in computer science.

In addition, there are interdepartmental joint majors in economics-mathematics and philosophy-mathematics.

### 130 MATHEMATICS

Colby mathematics majors in recent years have entered graduate school to do advanced work in mathematics, statistics, computer science, biomathematics, and physics. They have also used the major as a solid foundation for careers in teaching, law, banking, insurance, management, the computer industry, and other areas.

All students who intend to enroll in one of the three calculus sequences are required to complete the mathematics placement questionnaire prior to registration.

The point scale for retention of the majors/minors applies to all courses in the majors/minors. No requirement for the majors/minors may be taken satisfactory/unsatisfactory.

Requirements for the Major in Mathematics

Completion of one year of calculus, Mathematics 253, 274, 333, 338, 401, 402, plus five additional courses chosen from Mathematics 262 and all mathematics courses numbered 300 or above.

Requirements for the Major in Mathematics with a Concentration in Computer Science

Completion of one year of calculus, Mathematics 253, 274, 333, 338, 378, 401, 402, Computer Science 115, 231, 232, plus two additional mathematics courses numbered 300 or above.

### **Requirements for the Minor in Mathematics**

Six mathematics courses, including completion of one year of calculus, Mathematics 253, and at least one mathematics course at the 300 level.

<sup>1</sup>Joint appointment in mathematics and computer science.

<sup>2</sup>On leave full year.

<sup>3</sup>Part-time.

101 **Calculus with Precalculus I** Designed for students who enter Colby with insufficient pre-calculus background for the standard calculus sequence. Offered only in the fall semester, the course would normally be followed by Mathematics 102j in the following January. The combination of 101 and 102j cover the same calculus material as Mathematics 121. Completion of 101 alone does *not* constitute completion of a college calculus course for any purpose; in particular, it does *not* qualify a student to take 122. Placement in 101 is by recommendation of the Mathematics Department *only*, based on the results of the calculus placement procedure. *Three credit hours*. MS. BASSETT

102j Calculus with Precalculus II A continuation of Mathematics 101. Successful completion of both Mathematics 101 and 102j is equivalent to completion of Mathematics 121. *Prerequisite:* Successful completion of Mathematics 101. One credit hour. MS. BASSETT

111 Introduction to Mathematics The historical and contemporary role of mathematics in culture and intellectual endeavor; history of mathematics; the nature of contemporary mathematics; mathematics as a tool for problem solving; logical reasoning; topics from geometry. *Three credit hours*. MR. DEVLIN AND MS. FRIEDMAN

**112d** Non-calculus Statistics Description of data, confidence intervals, tests of hypotheses, non-parametric statistics, correlation and regression (including multiple regression), use of computer statistical packages. Credit is not given for both Mathematics 112 and 231. Four credit hours. MR. HAYSLETT AND MR. WHITTINGHILL

[117] Introduction to Discrete Mathematics A study of logic, sets, relations, and combinatorics. Four credit hours.

[118] Computational Linear Algebra with Applications An introduction to linear alge-

bra, taught from a computational and algorithmic point of view, with applications from a variety of disciplines. Matrices and determinants, linear systems, vector spaces, and eigenvalues. *Four credit hours*.

119d Introduction to Calculus and Its Applications Differential and integral calculus of functions of one variable: derivatives, integrals, and applications. Includes exponential and logarithmic functions. Emphasis on geometric understanding; applications taken from the social and biological sciences. The course does not normally lead on to a further calculus course; exceptions require permission of the instructor. Credit is not given for both Mathematics 119 and 121. Students electing this course must complete the mathematics placement questionnaire prior to registration. Four credit hours. MS. BOYD

**121d** Calculus I Differential and integral calculus of one variable: limits and continuity; differentiation and its applications, antiderivatives, the definite integral and its applications; exponential, logarithmic, and trigonometric functions. Credit is not given for both Mathematics 119 and 121. Students electing this course must complete the mathematics placement questionnaire prior to registration. *Four credit hours*. FACULTY

**122d** Calculus II Further study of differential and integral calculus of one variable; infinite series; vectors and analytic geometry in two and three dimensions; vector calculus; multivariable calculus; infinite series. *Prerequisite*: Mathematics 121 (or 102j). *Four credit hours*. FACULTY

123 Calculus of One and Several Variables I An honors course involving the use of a computer laboratory. Differential calculus of one and several variables: functions, limits, continuity, differentiation. May not be taken for credit if the student has earned credit for Mathematics 121. Students must have had substantial calculus in high school. Students electing this course must complete the mathematics placement questionnaire prior to registration. Four credit hours. MR. NORTHRUP

124 Calculus of One and Several Variables II A continuation of Mathematics 123. Integral calculus of one and several variables; infinite series. May not be taken for credit if the student has earned credit for Mathematics 122. *Prerequisite:* Mathematics 123. *Four credit hours*. MR. NORTHRUP

**193** Mathematics Seminar I An introduction to some of the basic ideas of mathematics (conjectures, refutations, proofs, etc.); discussions of issues of current interest to mathematicians. Topics vary, but the intention is to cover material not in any of the regular mathematics courses. Recent mathematical discoveries may be discussed. May be repeated for additional credit. *Prerequisite*: Permission of the instructor. Nongraded. *One credit hour.* MR. DEVLIN

**194** Mathematics Seminar II The same format as Mathematics 193. Covers topics different from those in 193 (in any one year). May be repeated for additional credit. *Prerequisite*: Permission of the instructor. Nongraded. *One credit hour.* MR. DEVLIN

**231d Elementary Statistics and Regression Analysis** Elementary probability theory, special discrete and continuous distributions, descriptive statistics, sampling theory, confidence intervals, tests of hypotheses, correlation, linear regression, and multiple linear regression. Examples and applications slanted toward economics. Credit is not given for both Mathematics 112 and 231. *Prerequisite:* Mathematics 119, 121, or 123. *Four credit hours*. MR. WHITTINGHILL AND MR. HAYSLETT

253d Linear Algebra Solutions of linear systems of equations, matrix algebra, determi-

## 132 MATHEMATICS

nants. Introduction to abstract vector spaces and linear transformations, eigenvalues, and eigenvectors. *Prerequisite*: Mathematics 122 or 124. *Four credit hours*. MR. FISCH AND MR. GOUVEA

**262** Advanced Calculus An advanced calculus course. Vectors, lines, and planes; limits, continuity, derivatives, and integrals of vector-valued functions; polar, spherical, and cylindrical coordinates; partial and directional derivatives; multiple integrals; line and surface integrals; Green's Theorem; Stokes' Theorem; Fourier series; applications. Typically involves the use of a large computer mathematics package such as *Mathematica* or *Maple*. *Prerequisite:* Mathematics 253. *Four credit hours*. MR. NORTHRUP

**272j** Introduction to Mathematical Modeling Deterministic, probabilistic, and simulation modeling of situations and phenomena—such as arms races, spread of epidemics, cultural stability, population growth, political coalitions—from a variety of subject areas. *Prerequisite:* Mathematics 119, 121, or 123. *Three credit hours*. MR. FISCH

**274d** Introduction to Abstract Mathematics A bridge between calculus and upper-level mathematics courses. The course presents the principles of mathematical logic and uses them to examine the standard methods of direct and indirect proof, including mathematical induction and epsilon-delta arguments. *Prerequisite*: Mathematics 122 or 124 or permission of the department. *Three credit hours*. MR. SKRIEN AND MR. GOUVEA

**311d2** Introduction to Differential Equations Theory and solution methods of first-order ordinary differential equations; linear differential equations; first-order linear systems; qualitative behavior of solutions; Laplace transforms; series solutions; existence and uniqueness of solutions; applications. *Prerequisite*: Mathematics 122 or 124, and 253. *Three credit hours*. MR. FISCH

[312] Topics in Differential Equations A continuation of Mathematics 311. Series solutions; boundary value problems; numerical methods; topics chosen from nonlinear differential equations, stability, difference equations, Fourier series, partial differential equations, and delay differential equations. *Prerequisite*: Mathematics 311. *Three credit hours*.

**331d2** General Topology Elementary set theory, functions, equivalence relations, topological spaces, basis for a topology, subspaces, concept of neighborhoods, open and closed sets, continuous functions, product topology, connectedness, separation axioms, coverings of spaces, compactness, paracompactness, metric spaces, and identification topology. *Prerequisite*: Mathematics 122 or 124, and 274. *Three credit hours*. MR. MATHES

**332** Introductory Numerical Analysis Solution by numerical methods of linear and nonlinear equations, systems of equations, and differential equations; numerical integration; polynomial approximation; matrix inversion; error analysis. *Prerequisite:* Some programming experience, Mathematics 122 or 124, 253, 274. *Three credit hours.* MR. NORTHRUP

**333** Abstract Algebra Introduction to algebraic structures, such as groups, rings, integral domains, and fields. *Prerequisite*: Mathematics 122 or 124, and 274, or permission of the instructor. *Four credit hours*. MR. GOUVEA

**336 Mathematics for Economics** Listed as Economics 336 (q.v.). Prerequisite: Economics 223, 224 and Mathematics 122 or 124. Three credit hours. MR. ROSS

**338 Real Analysis** An introduction to real analysis. Prerequisite: Mathematics 122 or 124, and 274. Four credit hours. MR. MATHES

**352 Complex Variables** The arithmetic and calculus of complex numbers and functions. The properties of analytic functions, including Cauchy's integral theorem and formula, representation by Laurent series, residues and poles, and the elementary functions. *Prerequisite:* Mathematics 122 or 124, and 274. *Three credit hours*. MR. MATHES

**372d1** Discrete Mathematics Selected topics in modern mathematics and operations research that have applications in current societal problems. The content will vary from year to year, but topics such as graph theory, combinatorics, game theory, linear programming, optimization techniques, and Markov chains may be considered. *Prerequisite:* Mathematics 122 or 124. *Three credit hours*. MR. SKRIEN

[376] History of Mathematics A survey of the major historical events of mathematical history, from the dawn of civilization to the twentieth century. Babylonian, Egyptian, Greek, and Arabic mathematical contributions examined in the context of their cultures. Modern mathematics viewed in the light of various trends that emerged after the beginnings of calculus. *Prerequisite*: Mathematics 122 or 124 or permission of the department. *Three credit hours*.

378 Introduction to the Theory of Computation Formal languages, automata theory, computability, complexity classes, propositional calculus, predicate calculus, undecidability. *Prerequisite:* Mathematics 274. *Three credit hours.* MR. DEVLIN

**381, 382** Mathematical Statistics Random variables, special probability distributions, moment generating functions, maximum likelihood estimators, sampling distributions, regression, tests of hypotheses, confidence intervals, linear models, analysis of variance. Although applications are discussed, the emphasis is on theory. *Prerequisite:* Mathematics 122 or 124. *Three credit hours*. MR. HAYSLETT

401,402 Senior Seminar Discussion of topics in pure and applied mathematics. Nongraded. *Prerequisite:* Senior standing in the mathematics major or a combined major including mathematics. *One credit hour for each semester.* FACULTY

**434** Topics in Abstract Algebra A sequel to Mathematics 333. Topics may vary from year to year. Prerequisite: Mathematics 333. Three credit hours. MR. GOUVEA

**439** Topics in Real Analysis A sequel to Mathematics 338. Content may vary from year to year, but topics such as topology, measure theory, functional analysis, or related areas may be considered. *Prerequisite:* Mathematics 338. *Three credit hours.* MR. MATHES

**491, 492** Independent Study Independent study in an area of mathematics of particular interest to the student. *Prerequisite:* Mathematics major and permission of the department. One to four credit hours. FACULTY

# Music

Chair, ASSOCIATE PROFESSOR JONATHAN HALLSTROM

Professor Paul Machlin; Associate Professors Dorothy Reuman<sup>1</sup> and Hallstrom; Assistant Professors Rebecca Gerber and Steven Saunders The Colby Music Department includes music historians, composers, and theorists, all of whom are performing musicians. The curriculum for majors and non-majors is designed to provide the broadest possible range of studies in music at all levels, while also allowing students the opportunity to develop their creative and expressive gifts as performers. The department's conviction that music is an art which bears an intimate relationship to the cultural and social matrix from which it springs is reflected in the diversity of course offerings.

Facilities include a 394-seat recital hall, two concert grand pianos and several smaller grands, an orchestra and band rehearsal room, an electronic music center with a variety of soundproducing and recording equipment, teaching studios, and practice rooms. Performances are scheduled in the recital hall and in Lorimer Chapel. The fine arts library contains a listening center, tapes and recordings, and resource materials for curricular and recreational needs.

**Requirements for the Major in Music** Music 181, 182, 241, 242, 281, 282, 341, 342, 493 or 494; one elective in music at the 200 level or higher; at leastfour semesters of graded credit in applied music (individual study or ensemble), and passing a senior comprehensive examination. The department requires majors to demonstrate, by means of a brief examination, a specified level of proficiency at the keyboard by the end of the sophomore year. The specific elements of the exam are available from the department.

The point scale for retention of the major applies to all courses in music except Music 111 or 153. No requirement for the major may be taken satisfactory/unsatisfactory.

Attention is called to the interdisciplinary majors in American studies and performing arts and to the minor in women's studies.

### <sup>1</sup>Part-time.

091j Applied Music Individual instruction for students who wish to devote the month of January to the study of voice or an instrument. Two half-hour lessons weekly, supplemented by individual daily practice. Similar arrangements can be made for students studying off campus. For additional information concerning fees and related matters, see the applied music statement following Music 494. Interested students should consult the department before registering. *Prerequisite:* Permission of the department. *Noncredit.* STAFF

111d Introduction to Music An overview of the Western art-music tradition from its beginnings to the present through the study of representative compositions. After a brief introduction to the fundamentals of music theory, the course surveys composers and works from the major periods of music history (Medieval, Renaissance, Baroque, Classical, Romantic, and Contemporary), emphasizing listening, critical thinking, and writing about music. Cannot be counted toward the music major. *Four credit hours*. MR. SAUNDERS

115j History of Chamber Music A history of music for string quartet offered by the members of the Portland String Quartet in residence at Colby College. Representative works by composers, i.e., Haydn, Mozart, Beethoven, and Schubert, will be studied in their cultural and historical context. *Two credit hours*. FACULTY

**133d2** American Music A survey of American music from the time of the Pilgrims to the present, examining the cultivated traditions of art song, symphony, chamber music, and opera, as well as the vernacular heritage of gospel hymnody, popular song, dance and march music, ragtime, Tin Pan Alley, Broadway musical, jazz, and rock. Includes close reading of selected works, study of selected composers (Billings, Foster, Gershwin, and Ellington), consideration of relationships between music and cultural context, and a survey of sources for the study of American music. *Four credit hours*. MR. SAUNDERS

[137j] History of Instruments The development of Western instruments beginning with the aulos and lyre of antiquity and culminating with synthesizers. The influence of specific composers on the development of new instruments or techniques. Three credit hours.

[138] Renaissance Culture and Music An examination of musical patronage in the European church and state and the important musical genres and composers of the Renaissance. Four credit hours.

**153d** Introduction to Music Theory An introductory survey of the main aspects of music theory and practice, including rhythm, intervals, scales and keys, melody, harmony, and form. Some music reading, creative writing, and analytical studies in various styles and periods are included. Primarily for students not intending to major in music. May not be taken for credit in addition to Music 181. *Four credit hours*. MRS. REUMAN AND INSTRUCTOR

[174] European Popular Song Before 1800 The history of European popular song before 1800, including Medieval and Renaissance popular songs, which often arose from everyday events: songs from troubadour and trouvere repertoires, Master- and Minnesinger songs, and English popular songs and carols. Four credit hours.

181 Music Theory I Within a sequence of courses designed to develop analytical skills for understanding the elements and structure of music, the course focuses on notation, intervals, scales, tonality, and melodic construction. Includes ear training and sight singing. Primarily for music majors and others with prior training in music. *Prerequisite*: Permission of the instructor. *Four credit hours*. MR. SAUNDERS

182 Music Theory II A continuation of Music Theory I; an introduction to four-part writing is included. Primarily for music majors and others with prior training in music. *Prerequisite:* Music 181 and permission of the instructor. *Four credit hours*. MRS. GERBER

**191d** Applied Music: Individual Study Instruction in voice and instruments for qualified students. Regular offerings include violin, viola, violoncello, piano, voice, flute, guitar (classical, American traditional, and jazz), organ, and selected brass and woodwind instruments. The student's performance in the course will be evaluated by faculty jury at the end of the semester. For additional information concerning fees, scheduling, and related matters, refer to the applied music statement following Music 494. May be repeated for additional credit. *Prerequisite:* Music 153 or 181 for graded credit (may be taken concurrently) and permission of the department. *One or two credit hours*. STAFF

**193d** Applied Music: Ensemble Credit for participation in musical ensembles sponsored by the music department. In addition to the Colby Symphony Orchestra, the Colby Chorale, the Collegium Musicum (early music ensemble), the Wind Ensemble, the Jazz Band, and the Chamber Music Ensemble, the department will undertake to form small ensemble groups as the need arises. Interested students should consult the department for additional information before registering. May be repeated for additional credit. *Prerequisite*: Music 153 or 181 for graded credit (may be taken concurrently) and permission of the department. *One credit hour*. STAFF

213 Introduction to Computer Music An introduction to computer music materials and synthesis options with emphasis on their use in composition; the basics of MIDI (the Musical Instrument Digital Interface), Frequency Modulation and Additive synthesis techniques, sampling, operation of studio hardware and software, etc. Students will create small composition etudes; the course will culminate in the creation of a larger, fully executed work. Enrollment

limited. Prerequisite: Music 181 or 153 and permission of the instructor. Three credit hours. MR. HALLSTROM

**232** Jazz Jazz between 1900 and 1950: the development of various forms and styles (the blues, New Orleans jazz, stride piano, big band music, bop), analyses of the music of performers and composers (Louis Armstrong, Bessie Smith, Duke Ellington, Charlie Parker, Miles Davis), and a study of the relationship between the vocal and instrumental forces that make the music. The music itself, as opposed to the sociology of jazz, constitutes the principal focus of the course. *Prerequisite:* Music 111 or 133 or 153 or 181. *Four credit hours*. MR. MACHLIN

[234] From Doo-Wop to Disco; Rock's First Era (1945–1975) A history of the music of rock and roll, with emphasis on an examination of (1) the music itself—its structure and clichés, (2) vocal techniques, (3) instrumentation, and (4) the lyrics. Although this examination focuses on analyses of the music of specific songs, other issues may be considered, including the development of certain genres (soul, Motown, protest rock, folk rock, acid rock); the role of women in rock; racism in rock; and the relationship between the music and the dances it inspired (e.g., the lindy, the twist, and the hustle). The work of certain composers/performers whose careers are central to the development of the music of this period (e.g., Ray Charles, Elvis Presley, the Beach Boys, the Beatles, Carole King, Stevie Wonder, Aretha Franklin) will be studied in some detail. *Four credit hours*.

[235] Studies in Chamber Music Repertoire An examination of significant chamber music works from the literature of the eighteenth through the twentieth centuries. In addition to placing the works in their historical context and analyzing them, participants in the course will prepare works for performance to be coached by the Portland String Quartet. May be repeated for additional credit. *Prerequisite:* Permission of the instructor. *One to four credit hours*.

**241d2 Topics in Music History: Composers Before 1750** The lives and representative works of selected composers before 1750. (Spring 1992: Monteverdi, Bach, Handel; Fall 1992: Perotin, Guillaume de Machaut, Josquin Des Prez.) *Prerequisite:* Music 182. *Four credit hours.* MRS. GERBER

242d1 Topics in Music History: Music Literature Before 1750 Representative major genres of music literature in the Western European tradition before 1750. (Fall 1991: Chant, motet, mass, chanson; Spring 1993: Counterpoint and fugue, vocal music—madrigal, cantata, opera.) Prerequisite: Music 241. Four credit hours. MRS. GERBER

**278d1** Opera as Theater A historical study of principles of opera production, with laboratory experience in staging scenes from several periods. *Prerequisite*: Permission of the instructor. *Four credit hours*. MR. MACHLIN

**281 Music Theory III** Form and structure, harmony, and an introduction to chromatic harmony. Primarily for music majors. *Prerequisite*: Music 182. *Four credit hours*. MR. HALLSTROM

**282** Music Theory IV Postromantic harmony and contemporary techniques, focusing on representative works of twentieth-century composers. Primarily for music majors. *Prerequisite:* Music 281. Four credit hours. MR. HALLSTROM

341 Topics in Music History: Composers After 1750 The lives and representative works of selected composers after 1750. (Fall 1991: Haydn, Mozart, Beethoven, Schubert; Fall 1992: Wagner, Debussy, Stravinsky, Cage and his legacy.) Prerequisite: Music 282. Four credit hours. MRS. REUMAN

**342 Topics in Music History: Music Literature After 1750** Representative major genres of music literature in the Western European tradition after 1750. (Spring 1992: Vocal Music—opera, choral literature, song—and Piano Literature of the nineteenth and twentieth centuries; Spring 1993: Chamber Music, Symphony, eighteenth and nineteenth centuries.) *Prerequisite:* Music 341. *Four credit hours*. MR. MACHLIN

[371] Composition Utilization of skills acquired through the study of theory, harmony, and musical analysis in the creation of small and large forms. Individual assignments will be made on the basis of each student's ability, training, and experience. Enrollment limited. *Prerequisite*: Music 182 or permission of the instructor. *Three credit hours*.

**†[373]** Counterpoint and Fugue The principles of sixteenth- and eighteenth-century polyphony as exemplified in the works of Palestrina and J. S. Bach. Composition of motets, canons, inventions, and fugues; analyses of representative works of both composers. Enrollment limited. *Prerequisite*: Music 281 or permission of the instructor. *Three credit hours*.

[374] Conducting and Score Reading Basic conducting techniques and their application to stylistic interpretation, designed to develop the student's ability to read a full instrumental or choral score with fluency and insight. In addition to practice in clef reading and transposition, analysis of scores for a variety of ensembles from different eras in music history will be stressed; elements of the analysis will include extraction of the main melodic and harmonic elements from the score for keyboard rendition. Enrollment limited. *Prerequisite:* Music 281 or permission of the instructor. *Three credit hours*.

**491, 492** Independent Study Individual topics in areas where the student has demonstrated the interest and competence necessary for independent work. Primarily for senior music majors. *Prerequisite:* Permission of the department. *One to four credit hours*. FACULTY

[493, 494] Seminar in Music Topics will change each semester; a complete description will be available before registration. Primarily for senior music majors. *Prerequisite*: Music 282 and permission of the instructor. *Three or four credit hours*.

Applied Music Private lessons in voice and a variety of instruments are available, with or without academic credit (see Music 191d). A student who has successfully completed for graded credit a theory of music course while enrolled in a college or university program away from campus approved for academic credit by Colby College, may petition the Department of Music to take an examination equivalent to the final examination of Music 153 or Music 181 (whichever is appropriate), one time only. Passing this examination can serve as a substitute for taking for graded credit and passing one of those two courses in order to fulfill the prerequisite for Music 191 and 193.

Fees for lessons, billed through the College business office, depend upon the number of credits elected; consult the music department for specific charges. Extracurricular instruction in applied music is also available in January, and may satisfy a January requirement; no academic credit for applied music may be earned in January. Students electing Music 091j or 191d, or taking extracurricular instruction, must consult the applied music coordinator (Mrs. Helen Staples); however, individual lessons are scheduled in consultation with the appropriate applied music associate. *Note:* By electing any applied music, the student incurs a responsibility for the appropriate fee.

Music majors, beginning in the first semester of their sophomore year, are eligible for six semesters of subsidized instruction in applied music (Music 191d for two credits) in the instrument of their choice. Majors are also eligible for an additional four semesters of subsidized

instruction; however, for those students who require instruction in piano in order to fulfill the piano proficiency requirement, two and only two of these additional semesters of instruction must be used towards completion of that requirement. Majors who study with approved instructors who are not members of the music department's applied music staff are eligible for the same subsidy; consult the applied music coordinator for specific criteria.

# Natural Science

[399] Teaching Natural Science Theory and practice in teaching natural science. Open to students with a minor in education. May not be counted toward any major. Does not satisfy the distribution requirement in natural science. Nongraded. *Prerequisite*: Education 231. *Three credit hours*.

# Performing Arts

Chair, PROFESSOR HOWARD KOONCE

Professor Koonce; Adjunct Associate Professors Christine Wentzel and Richard Sewell<sup>1</sup>; Assistant Professor Joylynn Wing<sup>2</sup>; Adjunct Assistant Professor James Thurston<sup>3</sup>; Technical Director John Ervin; Artists in Residence Anna Sullivan and Steven Gale

ADVISORY COMMITTEE: Professors Brancaccio (English), Koonce (English and Performing Arts), Paul Machlin (Music), Wentzel (Performing Arts), Sewell (Performing Arts), David Simon (Art), Thurston (Performing Arts), and Wing (Performing Arts and English)

The program in the performing arts enlarges existing patterns of academic concentration through credited course work in theater, theatrical music, and dance. The program is founded on two premises: first, that performance is essential to a full understanding of the art form; second, that all the arts share significant modes of thought and expression, and that a knowledge of one art form will contribute to an understanding of all the arts. In addition to traditional lecture/discussion courses, the program includes frequent opportunities for practical experience in the theater.

The major in performing arts is a liberal arts, not a pre-professional, major. It is, however, a major which will adequately prepare particularly interested and talented students for graduate study and further involvement with performing groups. It is a structured major which ensures that all students have experience and training in technical theater as well as appearing on stage. It is an interdisciplinary major which relates the study of theater and dance to the study of art, music, and literature.

As part of its offerings, the Performing Arts Department has established the Colby in London program, an opportunity to experience and study the performing arts with British professionals. The program strongly encourages majors to elect this opportunity and provides for non-majors interested in performance a unique, richly rewarding semester or year abroad.

Requirements for the Major in Performing Arts

I: Performing Arts 111, 171, 494.

II: English 327 and 328, both for four credits, and four additional courses in art, music, and/or dramatic literature chosen with the consent of the major adviser.

III: Six additional courses in Performing Arts chosen with the consent of the major adviser, including one course in acting or dance, one course in design, and one course in directing or choreography.

IV: Significant participation in performance (design, directing, acting, dance) in three semesters.

The point scale for retention of the major applies to all courses offered toward the major. No requirement for the major may be taken satisfactory/unsatisfactory.

Requirements for the Minor in Performing Arts

Performing Arts 171, either English 327 or 328 for four credits, and five elective courses chosen among three possible emphases within the minor: acting and directing; design and technical theater; and dance. Specific course elections must be made in consultation with a designated adviser in Performing Arts.

<sup>1</sup>Resident director, Colby in London, second semester.
<sup>2</sup>On leave, second semester.
<sup>3</sup>Resident director, Colby in London, first semester.

031j London Theater See off-campus January Program listing. Noncredit. FACULTY

**093j** Applied Theater Significant participation in a production during January. Enrollment limited to members of the cast and crew. *Prerequisite*: Permission of the performing arts committee. *Noncredit.* MR. SEWELL AND MR. GALE

111d Theater Production An introduction to the theatrical design and technical production process. Course focus is on design, technical production organization and management, the stage and its equipment, tools, materials, and methods used to execute scenery, costumes, lighting, and sound. Students must sign up for one lab section, as work on Performing Arts productions is fundamental to an understanding of the performing arts. Requires attendance at Powder and Wig and Performing Arts productions. Enrollment limited. *Four credit hours*. MR. THURSTON AND MR. ERVIN

115d Studio I, Intermediate Dance: Theory and Technique Concentration on the basic principles of dance movement: body alignment, coordination, strength and flexibility, forms of locomotion. *Prerequisite:* A minimum of one year of dance study and placement by the instructor. *Two credit hours*. MS. WENTZEL

131j London Theater See off-campus January Program listing. Three credit hours. FACULTY

**153j** Drama in Performance I Production of a play that will be studied both in its cultural context and as a representative of its kind, emphasizing the interplay between an intellectual command of a text and the problem of presenting a unified idea in actual production. Enrollment limited. See also Performing Arts 254, 354, and 454. *Prerequisite:* All registrants must be members of the cast or crew. *Three credit hours*. MR. SEWELL AND MR. GALE

155, 156 Modes of Interpretation and Creativity in the British Theater I A study of dramatic texts for and performances of plays on stage in England. Offered in Colby in London. Four credit hours. FACULTY

171d Introduction to Performing Arts A team-taught overview of the techniques of stage performance and their historical development. The fourth credit hour is for an acting workshop which meets weekly to prepare a presentation for the whole class. Enrollment in the fourth credit limited. Three or four credit hours. FACULTY

175, 176 Techniques of Performing in the British Theater I Offered in Colby in London. Four credit hours. FACULTY

211d2 Topics in Design and Technical Production I Advanced studies in design and

technical production. Topics of study might include: design theory, production management, production design, technical direction, and theater architecture. When possible, students are encouraged to participate in a Performing Arts production. Formerly listed as Performing Arts 393. *Prerequisite:* Performing Arts 111 or permission of the instructor. *Two to four credit hours*. MR. THURSTON AND MR. ERVIN

[212] Fundamentals of Stage Managing and Directing The basic techniques of staging dramatic scripts. Prerequisite: Performing Arts 171 or permission of the instructor. Three credit hours.

**215d** Studio II, Advanced Dance: Theory and Technique Focuses on refining personal, technical clarity with regard to movement expressivity in performance (phrasing, dynamics, rhythmic acuity). Two credit hours. MS. WENTZEL

**218d1 Play Writing** Basic problems in writing for the stage. Students will convert brief narratives (from Kafka, Boccaccio, Borges, etc.) into dramatic form to examine challenges of compression, stage (as different from narrative) impact, delineation and development of character, and then write a dramatization or an original play or sequence of scenes. Limited enrollment. *Prerequisite:* One course in the literature of the performing arts, any performing arts course, or permission of the instructor. *Three credit hours*. MR. SEWELL

**231** Scene Design The theory and art of scene design with emphasis on formulation of a viable design concept for the stage through script analysis, research, sketching, rendering, and drafting. Projects include presentation of research and design ideas based on plays, operas, musicals, and dance (ballet and modern). Enrollment limited. *Prerequisite*: Performing Arts 111 or permission of the instructor. *Three or four credit hours*. MR. THURSTON

**†[232]** Stage Lighting The theory and art of stage lighting. The lighting design process is explored through projects concentrating on script analysis, research, drafting, and work on Performing Arts Department productions. Attendance at Performing Arts and Powder and Wig productions required. Enrollment limited. *Prerequisite*: Performing Arts 111 or permission of the instructor. *Three or four credit hours*.

[233] Stage Costume Design Line, form, movement, color, characterization, and rendering in stage costume design, in conjunction with appropriate scenographic theory. Whenever practicable, students will be involved in practical theatrical costuming. *Three credit hours*.

[235] Stage Make-up The study of stage make-up as a method of enhancing character, illustrating age, defining personalities, and showing social, economic, and psychological attributes of the characters of assigned plays. Research in certain historical periods to determine styles of dress, make-up, hair style, and body adornment for a variety of social/economic levels. *Three or four credit hours*.

**241** Dance and Movement, Improvisation and Theory I Description and analysis of movement and its relation to basic elements of dance: time, space, weight, and flow; improvisation; introduction to elementary notation. *Prerequisite*: Participation in the Colby Dancers or permission of the instructor. *Three credit hours*. MS. WENTZEL

**†[253]** Dance Repertory I Advanced applied dance theory. Study and performance of faculty works, commissioned choreography, or period pieces reconstructed from labanotation. Topics change each semester. Enrollment limited. See also Performing Arts 353 and 453.

Prerequisite: Performing Arts 341 (may be taken concurrently), or permission of the instructor. Three credit hours.

**254d** Drama in Performance II See description for Performing Arts 153. Prerequisite: All registrants must be members of the cast or crew. Three or four credit hours. FACULTY

**255, 256** Modes of Interpretation and Creativity in the British Theater II See Performing Arts 155, 156. Offered in Colby in London. Four credit hours. FACULTY

**271 Improvisation** The course focuses on invention and its taking shape through the use of structured improvisational problems. Through the use of theater games and sports the class will approach theater/dance from two sides: conceptualization and action. The process allows students to break through thinking and movement patterns that have limited them in the past by responding to each other's imagination, energy, and style. Enrollment limited. *Prerequisite:* Performing Arts 171 or permission of the instructor. *Three credit hours*. MS. SULLIVAN

275, 276 Techniques of Performing in the British Theater II Offered in Colby in London. Three credit hours. FACULTY

**293d** Applied Theater Optional credit for significant participation in productions, applied workshops, or performances staged in conjunction with classes in directing. May be repeated for additional credit. Enrollment limited. Nongraded. *Prerequisite:* For actors, an acting course numbered 175 or higher (may be taken concurrently); for technicians, Performing Arts 111 (may be taken concurrently); all students must obtain permission of the performing arts chair. *One credit hour*. FACULTY

**297** Topics in Theater Production Organizing and Facilitating Performances. Using Sterns's Stage Management, students develop promptbook, charts, and procedures for staging a major play; then research (historically and stylistically) and construct some challenging prop or costume. Emphasis on sources as well as techniques. *Prerequisite*: Performing Arts 111 or 171. *Three credit hours*. MR. SEWELL

**298 Dance in Performance** An experiential and analytical study of choreography. The course will first focus on the essential elements required for staging existing pieces choreographed and presented in concert by the students and then will focus on critical examination and discussion of works by other choreographers, both amateur and professional. *Prerequisite:* Performing Arts 241 and permission of the instructor. *Three credit hours*. MS. WENTZEL

**311d2** Topics in Design and Technical Production II See description of Performing Arts 211. Prerequisite: Performing Arts 211 and permission of the instructor. Two to four credit hours. MR. THURSTON AND MR. ERVIN

**312** Topics in Stage Directing The special challenges and demands of directing particular kinds of plays and/or plays from particular periods and cultures. Enrollment limited. Formerly listed as Performing Arts 311. *Prerequisite:* Performing Arts 212 or participation in at least one faculty-directed production at Colby. *Three credit hours*. MR. GALE

**†[314]** Topics in the History of Theater and Dance Advanced study of selected aspects of the theory and practice of staging. Topics will vary from semester to semester and will include such subjects as costume and custom, the development of dance as an art form, the history of stage design, and problems of staging in selected periods. May be repeated for additional credit. *Prerequisite:* Performing Arts 171 or permission of the instructor. *Three credit hours*.

#### 142 PERFORMING ARTS

**316** Applied Dance Optional credit for participation in Colby Dancers. May be repeated for additional credit. *Prerequisite*: Performing Arts 215 and placement by the instructor. *Two credit hours*. MS. WENTZEL

333 Voice in Acting Offered in Colby in London. Two credit hours. FACULTY

334 Stage Movement Offered in Colby in London. Two credit hours. FACULTY

341 Advanced Dance Theory and Composition Formal compositional fundamentals of dance and their application to group choreography; the relation of dance to other arts disciplines. *Prerequisite*: Performing Arts 241 or permission of the instructor. *Three credit hours*. MS. WENTZEL

[353] Dance Repertory II See description for Performing Arts 253. Prerequisite: Performing Arts 341 (may be taken concurrently), participation in Colby Dancers, or permission of the instructor. Three credit hours.

**354d Drama in Performance III** See description for Performing Arts 153. Prerequisite: All registrants must be members of the cast or crew. Three credit hours. FACULTY

**374** Scene Work (Acting) Two- and three-person scenes from the modern repertory (Chekhov to present) form the basis for acting study (principally in the Stanislavskian technique) for those with some performance experience. Plays from which scenes are drawn will be read in their entirety. Enrollment limited. *Prerequisite*: Performing Arts 171 or permission of the instructor. *Three credit hours*. MR. GALE

411d2 Topics in Design and Technical Production III See description for Performing Arts 211. Formerly listed as Performing Arts 493. Prerequisite: Performing Arts 211 or permission of the instructor. Two to four credit hours. MR. THURSTON AND MR. ERVIN

†[453] Dance Repertory III See description for Performing Arts 253. Prerequisite: Performing Arts 341 (may be taken concurrently), participation in Colby Dancers, or permission of the instructor. Three credit hours.

**454d** Drama in Performance IV See description for Performing Arts 153. Prerequisite: All registrants must be members of the cast or crew. Three credit hours. FACULTY

**472d1 Topics in Acting** The special challenges and demands of acting in particular kinds of plays and/or plays from particular periods or cultures. Brief repertories may be presented, but emphasis is on process rather than production. May be repeated for additional credit. Enrollment limited. *Prerequisite:* Performing Arts 171 and permission of the instructor. *Three credit hours*. MS. SULLIVAN

491, 492 Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. One to four credit hours. FACULTY

**494** Senior Seminar A culminating seminar for performing arts majors. Specific subject matter will be selected for each class to enable designers, directors, dancers, and actors to collaborate in translating the intellectual understanding of the subject into the trical performance. Enrollment limited. *Prerequisite:* Senior standing as a major in performing arts. *Four credit hours*. FACULTY

# Philosophy

#### Chair, PROFESSOR YEAGER HUDSON

#### Professors Hudson and Robert McArthur<sup>1</sup>; Associate Professors Daniel Cohen<sup>2</sup> and Cheryl Calhoun; Instructor Jill Gordon

"Philosophy," as William James put it, "is an attempt to think without arbitrariness or dogmatism about the fundamental issues." One of the core disciplines of the liberal arts, philosophy provides a unique perspective on human and social problems. As a critical and an integrative discipline, it collects and analyzes the questions that arise from the basic principles of all areas of knowledge. Colby's program features a sequence of courses dealing with both Western and Eastern intellectual and philosophical history, as well as courses treating the major philosophical issues.

#### Requirements for the Major in Philosophy

Philosophy 152, 211, 331, 332, 353, either 491 or 492, and 12 additional hours in philosophy, at least eight of which are above the 100 level.

#### Requirements for the Major in Philosophy-Religious Studies

Religious Studies 211, 212, 233, 234, 316; Philosophy 152, 211, 331, 332, 372, 373; either 491 or 492.

Foreach of the above majors the independent study project (Philosophy or Religious Studies 491 or 492) must be for at least three credit hours and must be taken in one of the semesters or in January of the junior or senior year. Students completing the honors program are not required to take 491 or 492.

The point scale for retention of each of the above majors applies to all courses that count toward the major.

#### Requirements for the Major in Philosophy-Mathematics

Philosophy 152; 111 or 211; 258, 331, 332, 353; Mathematics 121 or 123; 122 or 124; 274, 333, 338. In addition, Mathematics 491 or 492 or Philosophy 491 or 492 or at least three credit hours, must be taken in one of the semesters or January of the junior or senior year. Students completing the honors program are not required to take 491 or 492. Physics 141, 142 is recommended for the major.

#### Honors Program

Students majoring in philosophy, philosophy-religion, or philosophy-mathematics, who have a grade point average of 3.0 or higher in the major, may apply during their junior year for admission to the honors program (see Philosophy 483, 484). On successful completion of the honors program, including a thesis, the student will graduate from the College "With Honors in Philosophy," "With Honors in Philosophy-Religious Studies," or "With Honors in Philosophy-Mathematics."

#### The Major in Classics-Philosophy

Attention is called to the interdepartmental major in classics-philosophy (requirements are listed under "Classics") and to the minor in quantitative analysis.

<sup>1</sup>Part-time; dean of faculty. <sup>2</sup>On leave second semester.

111d Central Philosophical Issues: Self and Society An introduction to philosophy by consideration of two of its central branches: social and political philosophy and ethics. Some of the issues addressed are: the nature of political power, individual rights, the good society, the nature of morality, and whether there are moral absolutes. These issues are approached through readings from several of the great philosophers of the West, such as Plato, Locke, Rousseau, and Mill. *Four credit hours*. MS. GORDON

114d1 Central Philosophical Issues: Nature and God An introduction to philosophy through an examination of three themes of fundamental philosophical importance: knowledge, reality, and God. Examples of issues include: What is knowledge? How is it achieved? What are its limits? Does mind objectively reflect or subjectively construct its own vision of reality? Is proof of God's existence or knowledge of God's nature possible? What is evil, how does it come to be, and who is responsible: God or Man? Readings include Plato, Aquinas, Descartes, Berkeley, Hume, and Tillich. *Four credit hours*. MR. HUDSON

†[116] Central Philosophical Issues: The Good Life An introduction to philosophy through an exploration of the themes of the meaning of life and the good life. Readings from philosophy, literature, and psychology. Authors include Plato, Aristotle, the Stoics, Mill, Marx, Nietzche, Melville, Camus, Sartre, Dostoevsky, and others. Four credit hours.

**†[118]** Central Philosophical Issues: Philosophy of Law An introduction to philosophy by a consideration of the interrelations between law, philosophy, and logic. Topics will include the nature and foundation of legal systems, the relation of law to morality, the limits of law, punishment, justice, and legal reasoning. *Four credit hours*.

[131j] Contemporary Moral Problems A brief introduction to moral theory, followed by an intensive study of a few current problems, including abortion, euthanasia, affirmative action, animal rights, and pornography. *Three credit hours*.

**135 Puzzles and Paradoxes** This course provides an introduction to some of the central concepts, problems, and methods of contemporary philosophy by engaging with an assortment of perplexing problems that inevitably arise when thought turns in on itself. Dilemmas of decision theory and paradoxes of rationality will be among the topics covered. *Three credit hours*. MR. COHEN

[137j] Philosophy of Art The nature of art and the basis of our judgment about art. Concepts of imitation, expression, form, institution, aesthetic attitude, and objective reasons as they relate to the arts. Two credit hours.

**152d** Logic The techniques of formal reasoning in a symbolic context, and their application to argumentation in natural language. *Three credit hours*. MR. COHEN AND MR. MCARTHUR

[153] Nonviolence Readings and discussion will focus on the following areas: theoretical considerations and definitions, the nature and advocates of violence, aggression, civil disobedience, Satyagraha, nonviolence and violence in American race relations, violence in American society, international conflict, and conflict resolution. *Three credit hours*.

**155j** Feminist Philosophies A survey of feminist philosophies with special attention to the political theory and practice of liberal feminism and socialist feminism. *Three credit hours*. MS. CALHOUN

174d1 Philosophical Anthropology: The Philosophy of Human Nature An introduction to philosophy through a comparative study of theories about human nature and destiny. Readings from great philosophers, scientists, and literary figures such as Plato, Rousseau, Skinner, Freud, the Sociobiologists, Sartre, Camus, and Tillich. Also listed as Anthropology 174. Four credit hours. MR. HUDSON

211d Moral Philosophy Consideration of various philosophical theories about the basis of

judgment on questions of good and bad, right and wrong, with lesser attention to the application of ethical principles to problem cases. *Three or four credit hours*. MS. CALHOUN

[212] Greek Ethical and Political Philosophy An intensive study of the Greek foundations of ethical and political thought. Questions of man, society, state, reason, good, and happiness, as addressed in the thought of such authors as Socrates, Aristotle, the Stoics and Epicureans, and some later Hellenistic skeptics, will be examined in detail. *Prerequisite:* One previous course in philosophy. *Three credit hours*.

[234] History of Science A survey of the growth of scientific theories from the Aristotelian-Ptolemaic world view through Newton's mechanical philosophy and Darwin's theory of evolution. *Three credit hours*.

**236d1** Social Philosophy Readings from traditional and non-traditional sources focusing on two questions: How does a thinker's view of human nature inform his or her view of social relations? And how have some groups in society been excluded from full social participation because of specific conceptions of human nature? Readings from Plato, Locke, Rousseau, Wollstonecraft, Mill, Marx, DuBois, Malcolm X, Tutu, Jaggar, Hood, Davis, and others. *Three or four credit hours*. MS. GORDON

**239d2** Theory of Knowledge A study of the nature and limits of human knowledge. Concepts such as belief, knowledge, truth, and justification and problems such as perception, induction, memory, and reason will be examined. Enrollment limited. *Three credit hours*. MR. HUDSON

[252] American Philosophy American philosophical thought from the colonial period to the twentieth century. The course will deal with a broad spectrum of American thinkers including the contributions of black and women philosophers as well as the more traditional philosophical figures. Three credit hours.

[255] Indian Thought Types of Indian philosophy of the ancient period. Three credit hours.

**†[256] Indian Thought** The development of Indian philosophy and intellectual history from the beginning of the Indian Renaissance in the late eighteenth century to the present. Readings from such thinkers as Gandhi, Tagore, Ramakrishna, Vivekananda, and Radhakrishnan. *Three credit hours*.

[258] Intermediate Logic The formal semantics of symbolic logic and its extensions, metatheoretic results such as soundness and completeness, the nature and limits of the axiomatic method, and philosophical problems concerning the nature of logical truth. *Prerequisite*: Philosophy 152 or permission of the instructor. *Three credit hours*.

[259j] Models of Mind A survey of the varying conceptions of human nature from the seventeenth century to the present day; the impact of scientific ideas on the way mind and human behavior are understood. Particular attention to twentieth-century behaviorist and cognitivist conceptions of mind and the relevance of recent computer technology to the understanding of language, thought, and consciousness. Readings from Descartes, Darwin, Freud, Watson, Chomsky, and others. *Prerequisite:* Permission of the instructors. *Three credit hours*.

[272] Seminar: Applied Ethics The interrelationship between moral principle and prob-

### 146 PHILOSOPHY

lem cases as a way of clarifying both theoretical concepts and practical policies. Emphasis on problem cases themselves, including issues such as abortion, euthanasia, civil disobedience, affirmative action, genetic intervention, and famine. Enrollment limited. *Prerequisite*: Philosophy 211 or permission of the instructor. *Three credit hours*.

[277, 278] Philosophical Perspectives Interdisciplinary considerations of various topics, involving lecturers from several departments. Three credit hours.

311 Contemporary Currents in Ethical Theory Beginning with a look at contractarian and Kantian depictions of the moral life in terms of duty, obligation, moral rationality, impartiality, and individual responsibility, the course examines arguments for broadening our conception of the moral life to include compassion, elective moral acts, partiality, moral luck, and shared responsibility. *Prerequisite:* Philosophy 211 or permission of the instructor. *Three credit hours*. MS. CALHOUN

[316] Metaphysics Metaphysics is the study of the general characteristics of what is the case. Kant made it clear that these general characteristics were isomorphic with the general characteristics of the inquiry itself. Kant's theory of phenomenon and noumenon gives a particular interpretation of this fundamental position. Kant's categories and Aristotle's fundamental principles of matter and form can be seen as huristic or anticipatory structures. Metaphysics thus becomes the anticipatory study of what the sciences study in detail *Four credit hours*.

[317] Philosophy of Science and Mathematics How are mathematical truths known? What is the status of scientific theory? Problems concerning inductive logic, observation, laws, theory construction, and scientific explanation will be considered. *Three credit hours*.

**331** History of Ancient Philosophy A survey of ancient thought which also examines the social and cultural context in which that thought arises. Study of the Greek world through the ideas of the pre-Socratics, the Sophists, Plato, Aristotle, Epicurus, the Skeptics, and the Stoics. *Four credit hours*. MS. CORDON

**332** History of Early Modern Philosophy European philosophy from Descartes to the nineteenth century, with special attention to the works of Descartes, Locke, Berkeley, Hume, and Kant. *Four credit hours*. MS. CALHOUN

**334** Philosophy of Education Listed as Education 434 (q.v.). Prerequisite: Education 231 or permission of the instructor. Four credit hours. MR. HUDSON

[338] Philosophy of Language Philosophy has taken a linguistic turn in the twentieth century: philosophers have come to suppose that reflection on the nature of language and the linguistic representation can help solve long-standing problems in the philosophy of mind and metaphysics. The development of the philosophy of language and its success; authors include Frege, Russell, Strawson, Grice, Kripke, Quine, Davidson, and Schiffer. Three credit hours.

**353** Contemporary Analytic Philosophy A seminar on Wittgenstein in the centenary of his birth. The course will set Wittgenstein in the context of twentieth-century analytic philosophy, concentrating on a study of his thought. Four credit hours. MR. COHEN

[359] Nineteenth-Century Philosophy Post-Kantian thinkers such as Hegel, Kierkegaard,

Nietzche, and others. Special attention to the revolt against reason, evolution, and alienation. *Prerequisite:* Philosophy 332 or permission of the instructor. *Four credit hours*.

**372d1** Philosophy of Religion Some of the principal philosophical problems concerning the nature and justification of religious belief and experience, problems such as the nature of God, arguments for the existence of God, the problem of evil, mysticism, and the relation of faith and reason. *Prerequisite:* One course in philosophy or religion, or permission of the instructor. *Four credit hours*. MR. HUDSON

[373] History of Medieval Philosophy History of philosophy from Augustine to Ockham. The principal issue studied is the problem of reconciliation of faith and reason in the work of the scholastics. *Prerequisite*: Philosophy 331. *Three or four credit hours*.

[374] Existentialism and Phenomenology A survey of the principal thinkers of existential philosophy, with minor attention to phenomenology. Readings from such philosophers as Kierkegaard, Nietzsche, Jaspers, Heidegger, Sartre, Buber, and Husserl. Philosophy 359 is a desirable background but is not required. *Prerequisite:* One course in philosophy or permission of the instructor. *Four credit hours*.

[378] Contemporary Continental Philosophy An examination of the main currents of contemporary European philosophy with emphasis on structuralism and its aftermath, hermeneutics, critical theory, as well as the issues of meaning, understanding, and modernity. Readings from Ricoeur, Foucault, Derrida, Gadamer, Adorno, Habermas, and others. *Prerequisite:* Philosophy 374 or permission of the instructor. *Three credit hours*.

**†[391]** Philosophy Seminar Seminars in selected areas of philosophy. Three or four credit hours.

**392 Philosophy Seminar: Socrates** An examination of Socrates as a philosopher, as a historical figure, and as the source of a tradition, reading ancient, modern, and contemporary sources, some of which pay tribute to Socrates and some of which are critical, among them Plato, Xenophon, Aristophanes, Kierkegaard, Nietzsche, and others. *Prerequisite:* Philosophy 331 or permission of the instructor. *Four credit hours*. MS. GORDON

[398] Philosophy of the Mind Traditional and contemporary theories of mind, including various forms of dualism, materialism, and causal theories. Discussion of the problem of personal identity will provide new perspectives on these theories. The questions of whether machines can think, and whether investigations into artificial intelligence can help us understand our own minds will also be discussed. *Three credit hours*.

**483,484 Philosophy Honors Program** Majors may apply in their junior year for admission into the Philosophy Honors Program. These courses require research conducted under the guidance of a faculty member and focused on an approved topic leading to the writing of a thesis. Upon successful completion of the thesis and the major, the student will graduate "With Honors in Philosophy," "With Honors in Philosophy-Religious Studies," or "With Honors in Philosophy-Mathematics." Enrollment limited. *Prerequisite:* Senior standing and a 3.0 grade point average in the major at the end of the junior year. *Three credit hours*. FACULTY

491, 492 Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. *One to four credit hours*. FACULTY

## Physical Education

#### Chair, ADJUNCT PROFESSOR RICHARD WHITMORE

Professor Richard McGee; Adjunct Professor Whitmore; Adjunct Associate Professors Carl Nelson, Tom Austin, James Wescott, Deborah Pluck, and Deborah Aitken; Adjunct Assistant Professors Charles Corey, Edward Mestieri, and Sheila Cain; Adjunct Instructors Paula Aboud, Gerald McDowell, Thomas Dexter, Alfred Holliday, Laura Halldorson, and Thomas Smith

The Department of Physical Education and Athletics offers required and voluntary physical education classes, intramural sports, intercollegiate athletics (varsity and junior varsity), and informal recreational activities.

Two semesters of physical education are required of all Colby students for graduation. Waivers are available for members of varsity or junior varsity teams.

A program of instruction in a variety of activities is offered on a coeducational basis. Activities presently in the program are *aquatics*: swimming, scuba; *leisure-time sports*: tennis, racquetball, golf, squash, skating, figure skating, cross-country skiing, badminton, riding; *dance*: modern, ballet; *team sports*: volleyball; *other activities*: yoga, conditioning, hiking, aerobics, weight training, nautilus training, archery.

**Physical Education Activities** Activity courses may be taken to fulfill the physical education requirement or as electives. Most activities last one season (one-half semester). Exceptions are so noted on transcripts and in materials available from the Physical Education Department. Registration is made through the Physical Education Department. *Noncredit*.

[112j] Women in Sports The historical, political, and social role of the American woman will be discussed in detail along with problems of special interest that affect today's women athletes. Topics include Title IX, administrative roles, drugs, feminism, fitness, homophobia, eating disorders, and amenorrhea. Enrollment limited. *Two credit hours*.

**213j** Sport and Society Sport is a phenomenon in our society that has not been given equal time, in terms of study, with other institutions in our society. Many of the current issues in sport and in athletes' lives have made a major impact on our society. A focus on the relationship between sport and society, group behavior and interaction patterns within sport settings at all levels of involvement, cultural, sociostructural, and situational factors affecting the nature or dynamics of sport and sport experience. *Prerequisite:* Permission of the instructor. *Two credit hours*. MR. MCGEE

### Physics

#### In the Department of Physics and Astronomy.

Chair, ASSOCIATE PROFESSOR MURRAY CAMPBELL

Professor John Dudley; Associate Professor Campbell; Assistant Professors James Fleming<sup>1</sup> and Charles Conover; Visiting Assistant Professor Robert Bluhm; Visiting Instructor A. Thomas Pickering The department seeks to train students to think analytically in terms of the fundamental principles of physics. Subject matter in introductory courses is selected to illustrate basic laws with wide applicability and to help prepare students to enter professions such as medicine, law, teaching, and business. Advanced course offerings provide excellent background for graduate study in physics, astronomy, engineering, and computer science. Special emphasis is placed upon independent work and cooperative research with the faculty in laser spectroscopy, field theory, and infrared astronomy. Research projects make use of the department's laser laboratory and supporting machine, electronic, and technical shops, as well as the campus timesharing computer and departmental workstations.

The Physics 141, 142 course sequence provides a solid basis for further work in physics as well as preparation for medical school and advanced study in the other physical sciences. Physics 141, 142, and 241 form a full introduction to classical and twentieth-century physics. Physics 254 provides training in electronics for scientific applications.

Requirements for the Major in Physics

Physics 141, 142, 241, 242, 254, 321, 333, 494, Mathematics 121, 122 (or 123, 124), 253, and 262. An internship, field experience, or independent project in physics or related field approved by the department chair are also required for graduation. The point scale for retention of the major applies to all courses taken in physics and mathematics. No requirements for the major may be taken satisfactory/unsatisfactory.

First-year students planning to major in physics should enroll in Physics 141, 142 and Mathematics 121, 122 or 123, 124. The major can also be completed if the sequence of courses is begun in the sophomore year.

Students anticipating graduate work in physics, astronomy, engineering, or a related field should expect to elect at least four additional courses in physics including Physics 311, 332, 353 j, 431, and at least two additional courses in mathematics including Mathematics 311, and a course in computer science. Students planning graduate work in physics, astronomy, or engineering should also consider the honors program described below. Students considering careers in pre-college level teaching should consult the Education Program early in their academic career.

#### Honors Program

In the second semester of the junior year, students who will have completed Physics 311, 322 or 332, Mathematics 311, and all courses specifically required for the major by the end of the junior year may apply for admission to the honors program. A 3.3 average in physics and mathematics courses is normally required. In addition to the major requirements, the honors program requires completion of Physics 311, 322, 332, and 431, an additional mathematics course numbered above the 100 level, and an experimental or theoretical thesis, to be defended in the last semester of the senior year. Successful completion of the honors program will result in the degree being awarded "With Honors in Physics." A thesis completed as part of the Senior Scholars Program may be substituted for the honors thesis.

Students seeking a career in engineering may consider exchange programs in which both a bachelor of arts and a bachelor of science in engineering can be earned upon successful completion of three years at Colby and two years at Dartmouth College, Case-Western Reserve University, or the University of Rochester. Students should consult with the engineering adviser before selecting their first semester courses.

### **Requirements for the Minor in Physics**

Physics 141, 142, 241, 242 (or a physics course numbered 300 or above), 494; Mathematics 121, 122 or 123, 124.

Attention is called to the interdisciplinary minor in applied mathematics.

<sup>1</sup>Joint appointment in science-technology studies.

111d2 From Galileo to Einstein Concepts of motion, space, time, energy, and matter are explored in the context of their historical development. Emphasis is on the theories and world views of Galileo, Newton, and Einstein. The course assumes no previous study of physics and is intended for nonscience majors, but a working knowledge of high school algebra is assumed. Lectures include hands-on demonstrations. *Three credit hours*. MR. BLUHM

### 150 PHYSICS

[112] Energy for Planet Earth The technologies of energy generation, distribution and utilization, and their impacts on the environment and society. The course assumes a working knowledge of high school algebra, but no previous study of physics. Lecture only. Three credit hours.

[121, 122] Survey of Physics Four credit hours.

[132] General Physics Four credit hours.

141, 142 Foundations of Physics A calculus-based survey of mechanics of solids and fluids, momentum, work and energy, gravitation, waves, electromagnetism, optics, and thermodynamics. Lecture, laboratory, and discussion. *Prerequisite*: A working knowledge of high school or college calculus, or concurrent enrollment in Mathematics 121 or 123. Physics 141 is prerequisite for 142. *Four credit hours*. MR. CONOVER AND MR. CAMPBELL

**193** Physics and Astronomy Seminar Discussion of topics of current interest in physics and/or astronomy. Nongraded. One credit hour. MR. CONOVER

[231] General Physics Four credit hours.

[232] Atomic Physics Four credit hours.

[232L] Atomic Physics Laboratory One credit hour.

**241 Revolutions in Physics I** Special relativity, Planck blackbody radiation, the basis of quantum mechanics, and the Schroedinger equation. Lecture and laboratory. *Prerequisite:* Physics 142 and Mathematics 122 or 124. *Four credit hours*. MR. BLUHM AND MR. CONOVER

242 Revolutions in Physics II An intermediate treatment of the quantum physics including the hydrogen atom, atomic models, Schroedinger theory, atomic spectra, and electron spin. Lecture and laboratory. *Prerequisite*: Physics 241 and Mathematics 262 (may be taken concurrently). *Four credit hours*. MR. BLUHM AND MR. CONOVER

**254 Essential Electronics** An introduction to modern scientific electronics emphasizing laboratory work and including theory, problem solving, and circuit design. From simple, direct-current devices to digital integrated circuits, microcomputer instrumentation, and analog signal processing. Formerly listed as Physics 153. Enrollment limited. *Four credit hours*. MR. CONOVER

**291j** Research and Seminar in Physics and Astronomy Individual or small-group work in one of several areas: atomic spectroscopy, development of laboratory apparatus, development of laboratory astronomical equipment, analysis of infrared astronomical data, or literature review of topics in physics or astronomy. Each student will present a written report and seminar midway through January, and at the conclusion of the work. *Prerequisite:* Permission of the instructor. *Two or three credit hours*. MR. PICKERING

311 Classical Mechanics Newton's laws, oscillatory motion, noninertial reference systems, classical gravitation, motion of rigid bodies, and Lagrangian and Hamiltonian mechanics. Lecture and discussion. Formerly listed as Physics 211. *Prerequisite*: Physics 141 and Mathematics 262 or permission of the instructor. *Three credit hours*. MR. CONOVER

321 Electricity and Magnetism A theoretical treatment of electrostatics and magneto-

statics in vacuum and material media through Maxwell's equations. Lecture and discussion. *Prerequisite:* Physics 142 and Mathematics 262 or permission of the instructor. *Four credit hours*. MR. CAMPBELL

[322] Topics in Classical Theoretical Physics Mathematical methods of theoretical physics with examples from electromagnetic theory, special relativity, and advanced mechanics. Lecture and discussion. *Prerequisite:* Physics 311 and 321, Mathematics 311, or permission of the instructor. *Three credit hours*.

**332** Thermodynamics Concepts of temperature, energy, entropy, heat, and work, and their thermodynamic relations as developed from a microscopic point of view. Single and multicomponent systems are discussed, using both classical and quantum statistics. Lecture and discussion. *Prerequisite:* Physics 241 and Mathematics 122 (or 124) or permission of the instructor. *Four credit hours*. MR. PICKERING

**333d2** Experimental Physics Experimental work in classical and modern physics: fundamental physical constants, mechanics, radioactivity, diffraction, and atomic and nuclear spectroscopy. *Prerequisite*: Physics 242, 254, or permission of the instructor. *Three credit hours*. MR. CAMPBELL

[336] Solid-state Physics An introduction to solid-state physics, beginning with a study of crystal forms and diffraction of x-rays. Thermal, optical, acoustical, and electrical properties of solids; the energy-band theory of semiconductors as applied to simple solid-state devices; superconductivity. *Prerequisite*: Physics 242, 321, or permission of the instructor. *Four credit hours*.

[338] Particle and Nuclear Physics Symmetries, fundamental particles and their interactions, and nuclear models and reactions. Lecture and discussion. *Prerequisite:* Physics 242. Four credit hours.

**351d** Tutorial in Physics and Astronomy Individual work for juniors on a subject of joint interest to the student and the instructor, involving close supervision, regular tutorial meetings, and active participation by both student and instructor. Suggested topics are general relativity, nuclear reactors, fluid mechanics, quantum mechanics, and topics in astronomy. *Prerequisite:* Permission of the instructor. *Two to four credit hours*. FACULTY

[353j] Numerical Methods in the Physical Sciences An introduction to the application of numerical methods to solving problems in the physical sciences. Topics include numerical integration and differentiation, matrix methods for solving simultaneous linear equations and eigenvalue problems, ordinary and partial differential equations, and Monte Carlo methods for integration, culminating in a single project. *Prerequisite*: Computer Science 115 and Mathematics 311 or permission of the instructor. *Three credit hours*.

[355j] Computer Aided Data Collection and Analysis A hands-on course in data acquisition and analysis using computers. Both the hardware and software concepts involved in data collection along with a group interfacing project; numerical techniques of data analysis. To be offered in alternate years with Physics 353j. *Prerequisite:* Computer Science 132 or Physics 254 or permission of the instructor. *Thre credit hours*.

431 Quantum Physics Nonrelativistic quantum mechanics including Schroedinger theory, operator algebra, angular momentum, and applications to simple atomic systems. Lecture and

discussion. Prerequisite: Physics 242 and Mathematics 311 or permission of the instructor. Three credit hours. MR. BLUHM

[432] Advanced Quantum Physics Quantum mechanics of atoms in external fields, including time independent and time dependent perturbation theory, treatment of identical particles, angular momentum addition, and a quantum description of light. Lecture and discussion. *Prerequisite*: Physics 322 and 431 or permission of the instructor. *Three credit hours*.

**451d Tutorial in Physics and Astronomy** Individual work for seniors. Refer to Physics 351d description. *Prerequisite*: Permission of the instructor. *Two to four credit hours*. FACULTY

491, 492 Independent Study Individual topics in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. One to five credit hours. FACULTY

**494 Physics and Astronomy Seminar** Discussion of topics of current interest in physics and/or astronomy. One credit hour. FACULTY

### Portuguese

In the Department of Romance Languages and Literatures.

**†[261, 262] Portuguese as a Second Romance Language** The spoken and written language of Portugal and Brazil, utilizing previous knowledge of a Romance language. Extensive use is made of taped materials. *Prerequisite*: Successful completion of intermediate French, Spanish, or Italian, or indication of equivalent proficiency. *Four credit hours*.

# Psychology

### Chair, PROFESSOR EDWARD YETERIAN

Professors Nicholas Rohrman, Diane Kierstead, and Yeterian; Associate Professor Dorin Zohner; Assistant Professors Gregory Kolden and William Klein; Teaching Associate Jahneene Nickerson The Psychology Department seeks to fulfill three objectives. First, to prepare students for graduate work in psychology and ultimately for professional careers as teachers, researchers, and practitioners. Second, to prepare students majoring in psychology to enter the business or professional community with a solid background in knowledge of human behavior and its determinants. Third, to provide service courses for students majoring in other fields for whom psychological knowledge may be useful. Laboratories are equipped to conduct a fairly wide range of studies in human sensory, perceptual, and memory phenomena and include animal facilities and surgery for physiological and comparative research. The laboratory for social, clinical, and developmental psychology is equipped with closed-circuit video for unobtrusive observation and data are recorded on VCRs in the data center. Auxiliary portable video equipment is available for use in other laboratories and in the field. The department also maintains electronic and wood shops for the construction of unique apparatus. Six small research laboratories are dedicated for use by advanced students. The data center is equipped with micro-computers as well as mainframe access in addition to housing the video monitoring station.

The department stresses the scientific approach to the study of human behavior and requires a fairly extensive set of quantitative and experimental courses for all majors. Each student conducts independent research as an integral part of the major. In the last five years, Colby psychology students have presented numerous papers at professional meetings, and have been awarded prizes for undergraduate research excellence given by the Maine Psychological Association at its annual scientific meeting.

Requirements for the Major in Psychology

For students who have had Psychology 111: Psychology 111, 214, 215, 479; at least one course from 251, 253, 255; at least one course from 258, 274, 277, 279; at least one course from 233, 236, 273; at least one course from 232, 234, 237; three additional psychology courses, excluding independent study.

For students who have not had Psychology 111: Psychology 121, 122, 214, 215, 479; at least one course from 251, 253, 255; at least one course from 258, 274, 276; at least one course from 233, 236, 273; at least one course from 232, 234, 237; two additional psychology courses, one of which must be selected from 352, 354, 356, 371, 372, 374, 376, 397.

One year of laboratory science is recommended.

Candidates for distinction in the major and honors in psychology must submit a score on the Psychology Advanced Test of the Graduate Record Examination.

The point scale for retention of the major applies to all courses offered toward the major as prescribed above. All requirements for the major must be met in conventionally graded courses. Attention is also called to the interdisciplinary minor in quantitative analysis.

Requirements for Honors in Psychology

Students seeking to participate in the honors program must make formal application to the department prior to enrolling in Psychology 393d. In addition to fulfilling the basic requirements for the psychology major, the honors program requires that students take one additional course in psychology numbered above 300 and complete the honors research sequence (Psychology 393d and 493d). Upon successful completion of these requirements and upon vote of the department, the student will be awarded his or her degree "With Honors in Psychology."

Attention is also called to the Senior Scholars program.

Requirements for the Minor in Psychology

For students who have had Psychology 111: Psychology 111, 214; at least one course from 251, 253, 255; at least one course from 258, 274, 277, 279; at least one course from 233, 236, 273; at least one course from 232, 234, 237; at least one course from 352, 354, 356, 371, 372, 374, 376, 397. For students who have not had Psychology 111: Psychology 121, 122, 214; at least one course from 251, 253, 255; at least one course from 233, 236, 273; at least one course from 251, 253, 255; at least one course from 352, 354, 356, 371, 372, 374, 376, 397.

[111] Introduction to Psychology An overview of contemporary psychology, introducing concepts and methods current in the field. Participation as a subject in psychological research is required. *Four credit hours*.

\*117j Altruism and Aggression Beginning with an overview of various approaches to understanding the causes of altruistic and aggressive behavior, consideration will be given to topics such as genetic determinants of criminal behavior, effects of televised aggression (e.g., cartoons), beliefs about fairness, and circumstances in which people are most likely to help others in distress. Later discussion will focus on love and hate, and the determinants of these emotions. Enrollment limited. Cannot be counted toward the psychology major or minor. Two credit hours. MR. KLEIN

121 Introduction to Psychology An examination of classical and contemporary issues in psychology: history and systems, research methods, biopsychology, sensation, perception, consciousness, learning, memory, cognition, and language. May not be taken for credit by students who have passed Psychology 111. Four credit hours. MR. ROHRMAN, MS. KIERSTEAD, AND MR. YETERIAN

122 Introduction to Psychology Further examination of classical and contemporary issues in psychology: development, motivation, emotion, intelligence, personality, psychopathology, psychotherapy, social psychology, applied psychology. May not be taken for credit by students who have passed Psychology 111. *Prerequisite*: Psychology 121. *Four credit hours*. MR. ZOHNER, MR. KOLDEN, AND MR. KLEIN

[131j] Drugs and Behavior Beginning with an overview of the nervous system and neurotransmitters, and a consideration of the psychological dimensions of substance use and abuse, the course reviews current data on the relationships among drugs, brain, consciousness, and behavior. The effects of a wide variety of licit and illicit substances will be surveyed—including alcohol, nicotine, caffeine, cocaine, amphetamines, marijuana, psychedelics (e.g., mescaline and LSD), opiates, prescription drugs (e.g., tranquilizers and antidepressants), and over-the-counter drugs (e.g., antihistamines). Special consideration to mechanisms of drug action and to the interrelatedness of molecular and molar approaches in understanding drug effects. Consideration also to current social issues regarding drugs, e.g., mandatory drug testing, and the possible legalization of currently illicit substances. Cannot be counted toward the psychology major or minor. Enrollment limited. Nongraded. *Prerequisite:* Psychology 111 or 121. *Two credit hours*.

**211j** Psychology of Sleep and Dreams An overview of contemporary research on sleep and dreams. Topics include physiological bases of sleep patterns, developmental and individual differences in sleep habits, disturbances and disorders of sleep, dreams and dream interpretation. Cannot be counted toward the psychology major or minor. *Prerequisite:* Psychology 111 or 121. *Two credit hours*. MS. KIERSTEAD

**214d** Research Methods and Statistics Discussion of techniques used in conducting behavioral research. Includes literature survey, hypothesis formulation, control techniques, and research design, as well as descriptive and inferential statistics. *Prerequisite:* Psychology 111 or 122, or permission of the instructor. *Four credit hours*. MS. KIERSTEAD AND MR. KLEIN

**215d Psychological Research** Each student will conduct a research project planned in Psychology 214, utilizing skills in experimental design, data analysis, and research report preparation acquired in that course. Ordinarily taken in the semester subsequent to Psychology 214. *Two credit hours*. MS. KIERSTEAD

[232] Cognitive Psychology The human information-processing system: how stimulus information is transformed, stored, retrieved, and used. Lecture and laboratory. Enrollment limited. *Prerequisite:* Psychology 111 or 121. *Four credit hours*.

**233 Physiological Psychology** The study of neural mechanisms underlying mental processes and behavior, including the ways in which the nervous system subserves sensory coding and perception, movement, motivation, emotion, consciousness, learning, and memory. Includes historical antecedents and integration of animal experimental and human clinical data. *Prerequisite:* Psychology 111 or 122, or permission of the instructor. *Four credit hours*. MR. YETERIAN

**234** Theories of Learning A comparative examination of Pavlovian, instrumental, and operant theories of learning and their application to animal and human behavior. Includes historical antecedents and current issues. Lecture and laboratory. Enrollment limited. *Prerequisite:* Psychology 111 or 122. *Four credit hours*. MR. YETERIAN

235 Laboratory in Brain and Behavior A laboratory supplement to Psychology 233.

Cannot be counted toward the psychology major or minor. *Prerequisite:* Concurrent or prior enrollment in Psychology 233 and permission of the instructor. *One credit hour.* MR. YETERIAN

[236] Comparative Psychology An examination of animal and human behavior, with emphasis on similarities and differences between species. Includes history of the discipline, behavioral description and categorization, genetic and environmental determinants, ontogeny, physiological mechanisms, evolution, and learning. *Prerequisite:* Psychology 111 or 122. *Four credit hours*.

**237 Psychology of Language** Selected topics in psycholinguistics, language and thought, the role of linguistic entities in psychological processes, propaganda and persuasion. Will normally include an independent project. *Prerequisite*: Psychology 111 or 122. *Four credit hours*. MR. ROHRMAN

**251** Theories of Personality A comparative examination of major approaches to and current research in personality. Includes psychoanalytic, dispositional, phenomenological, behavioral, and cognitive information processing paradigms as well as special topics such as personality and health, gender differences in personality, and cultural differences in personality. *Prerequisite:* Psychology 111 or 122. *Four credit hours*. MR. KOLDEN

**253** Social Psychology An examination of major topics and current issues and research in social psychology. Includes social perception, social cognition, attitudes, prejudice and discrimination, interpersonal attraction, social influence, prosocial behavior, aggression, social exchange, group interaction, and various special applied topics such as social psychology and human sexuality, health, and the legal system. *Prerequisite*: Psychology 111 or 122. *Four credit hours*. MR. KLEIN

**255** Child Development Principles of psychological development from conception through preadolescence, from a biological, sociocultural, and psychodynamic perspective. For related practica courses, see Education 253, 254. *Prerequisite*: Psychology 111 or 122. *Four credit hours*. MR. ZOHNER

**256** Adolescent and Adult Development Principles of psychological development from adolescence through senescence. Emphasis will be placed on the individual's typical attempts to cope with changes in physical structure, social roles, and personal identity. For related practica courses, see Education 353. *Prerequisite*: Psychology 255. *Four credit hours*. MR. ZOHNER

**258d1** Educational Psychology Psychological principles applied to problems of education. Principles of developmental psychology, educational testing and measurement, child and adolescent problems, and pathology. *Prerequisite:* Psychology 111 or 122, or permission of the instructor. *Three credit hours*. MR. ZOHNER

**273d2** Sensation and Perception The major human senses (vision, audition, somesthesis, taste, smell) studied as physiological systems and as intermediaries between the physical and perceived environments. *Prerequisite:* Psychology 111 or 122, or permission of the instructor. *Four credit hours*. MS. KIERSTEAD

[274] Applied Psychology A survey of non-clinical applications of psychology, including as possibilities such content areas as consumer behavior, advertising, the impact of mass media on behavior, forensic, environmental, and medical psychology. *Prerequisite*: Psychology 111 or 122. Four credit hours.

276 Health Psychology An examination of issues and research in health psychology; includes historical and current conceptualizations of health and illness, biopsychosocial contributions to health and illness, and clinical intervention strategies as applied to a variety of health-related behaviors (e.g., smoking, nutritional habits, exercise, abuse of alcohol and other drugs), health promotion, illness prevention, and biopsychosocial reactions to illness. *Prerequisite:* Psychology 111 or 122. *Four credit hours*. MR. KOLDEN

**297 Psychology of Fascism** An examination of historical, social, and psychological forces that lead to the development of oppressive totalitarian governments, with a focus on Nazi Germany as a model. Cannot be counted toward the psychology major or minor. *Prerequisite*: Psychology 111 or 122. *Four credit hours*. MR. ROHRMAN

**331 Perception of Self and Others** How we judge and explain the behavior of others, and how factors such as goals, power, and cognitive resources affect these perceptions; discussion topics include stereotypes, first impressions, self-fulfilling prophesies, and accuracy in social perception. Focus on people's evaluation of themselves, such as how they view their abilities and potential; issues include whether people prefer accurate or self-enhancing feedback, how they negotiate their environment to achieve goals, and the resulting implications for academic achievement, health, and social relationships. *Prerequisite:* Psychology 253. *Four credit hours*. MR. KLEIN

**352 Psychology of Exceptional Children** The origins and implications of cognitive, sensory, emotional, and physical handicaps for development will be explored and discussed. Models for intervention and/or remediation at each age level and their developmental outcomes will be examined. *Prerequisite*: Psychology 255 or permission of the instructor. *Four credit hours*. MR. ZOHNER

**354 Abnormal Psychology** An examination of major paradigms, current issues, and research in abnormal psychology. Includes definitions and conceptualizations of abnormality, diagnostic classification, epidemiology, etiology and pathogenesis, and clinical intervention strategies as applied to the major categories of mental disorder. Special topics such as deinstitutionalization, mental illness and the homeless, involuntary commitment, the insanity defense, gender differences in mental disorders, and sexual victimization will be covered as interest and opportunity allows. *Prerequisite:* Psychology 251 or 255. *Four credit hours*. MR. KOLDEN

**356** Social Psychology Seminar Critical examination of various areas of research in social psychology, with an emphasis on current issues. Discussion topics may include attitude structure and change, cognitive dissonance, group dynamics, health beliefs and behavior, justice, reasoning, self-presentation, social cognition, and stereotypes. Enrollment limited. *Prerequisite:* Psychology 253. *Four credit hours*. MR. KLEIN

**359j** The Mental Health Service Delivery System: Augusta Mental Health Institute Beginning with an overview of historical conceptualizations and interventions for the mentally ill, this course will review the political, social, economic, and psychological factors that influence the delivery of mental health services in America today. Students will have the opportunity to experience the mental health service delivery system first-hand, residing at the Augusta Mental Health Institute, taking meals with patients, socializing with them, and functioning as active members of a multidisciplinary psychotherapeutic treatment team. Consideration also to current issues in mental health service delivery, e.g., public protection vs. civil liberties of the mentally ill, including involuntary and criminal commitment procedures; the patient's right to the "least restrictive" treatment; social stigmatization of the mentally ill; the role of psychotropic medications; "deinstitutionalization"; the concept of "dual diagnosis"; and prevention and aftercare. An analytical paper is required. Cannot be counted toward the psychology major or minor. Enrollment limited to ten. Nongraded. *Prerequisite*: Psychology 251 or 255, and permission of the instructor. *Three credit hours*. MR. KOLDEN

[371j] Advanced Experimental Psychology Experimental design and the application of inferential statistics. Strongly recommended for those students interested in graduate school. *Prerequisite:* Psychology 214, 215, and permission of the instructor. *Three credit hours*.

[372] Neuroscience Seminar In-depth examination of current issues in physiological psychology and human neuropsychology. Topics include hemispheric specialization, sex differences in the nervous system, neural substrates of learning and memory, physiological bases of behavior disorders, drugs and behavior, psychosurgery, and brain tissue transplants. Includes integration of animal experimental and human clinical data. *Prerequisite:* Psychology 233 or permission of the instructor. *Four credit hours*.

**374** Human Neuropsychology The neural bases of abnormal human behavior and cognition, with integration of data from clinical neuropsychology and behavioral neurology. Topics include brain imaging technologies; neuropsychological evaluation; brain dysfunction and mental illness; drugs, neurotransmitters, and behavior; developmental disorders (e.g., autism); dementias and memory disorders (e.g., Alzheimer's disease); degenerative disorders (e.g., Parkinson's disease); infectious diseases (e.g., AIDS); seizures; traumatic brain injury; disorders of communication; and emotional-motivational dysfunction. Emphasis is given to the way in which disorders of the nervous system aid in understanding normal psychological processes. *Prerequisite*: Psychology 233. Four credit hours. MR. YETERIAN

[376] Seminar in Vision In-depth coverage of visual sensation and perception. Topics typically include the effects of light on the eye, eye anatomy and pathology, color vision and its disorders, visual after-effects and illusions, depth and motion perception, developmental changes in vision, night vision, and perceptual factors in aircraft and traffic accidents. *Prerequisite:* Psychology 273. *Four credit hours*.

**393d** Honors Research I Individual and group meetings of students and faculty participating in the psychology honors program. Under faculty supervision, students will prepare a proposal and begin work on an independent research project to be completed in Psychology 493d. Enrollment limited. *Prerequisite:* Standing as a junior or senior major in psychology and permission of the department. *Three credit hours*. FACULTY

**454d1** Clinical Psychology Seminar Advanced examination of major approaches to, and current issues and research in, clinical psychology with integration of data from personality, developmental and abnormal psychology. Emphasis on the application of the major psychological tests and clinical intervention strategies to specific categories of mental disorders. Topics include intellectual testing, objective and projective personality testing, and neuropsychological testing as well as the major approaches to clinical intervention: individual, group, marital, and family. *Prerequisite:* Psychology 354 and permission of the instructor. *Four credit hours*. MR. KOLDEN

**479** History and Systems of Psychology The historical background of modern psychology and the development of such systematic viewpoints as behaviorism, Gestalt psychology, and psychoanalysis. *Prerequisite:* Senior standing as a psychology major or permission of the instructor. *Four credit hours*. MR. ROHRMAN

491, 492 Independent Study Individual projects in areas in which the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the department. One to four credit hours. FACULTY

**493d** Honors Research II Individual and group meetings of students and faculty participating in the psychology honors program. Under faculty supervision, each student will complete the independent research project begun in Psychology 393d, prepare a paper of publishable quality, and make a formal presentation of the work. Enrollment limted. *Prerequisite:* Psychology 393d, standing as a senior major in psychology, and permission of the department. *Three credit hours*. FACULTY

## **Public Policy**

Director, PROFESSOR THOMAS TIETENBERG

ADVISORY COMMITTEE: Professors Anthony Corrado (Government), G. Calvin Mackenzie (Government), L. Sandy Maisel (Government), James Meehan (Economics), Sonya Rose (Sociology and Anthropology), and Tietenberg (Economics)

The Public Policy Program is an interdisciplinary minor that builds upon foundations of economics and government to enable students to engage in thoughtful and sophisticated analysis of important public policy issues. The public policy minor is designed to develop in Colby students the ability to apply the methodologies and accumulated knowledge of several disciplines to complex public problems through a combination of classroom, independent research, and work experiences.

### Requirements for the Minor in Public Policy

It is anticipated that all requirements listed below, with the exception of the senior seminar, will be completed before the beginning of the senior year. The requirements for the chemistry public policy minor are specified in the catalogue under "Chemistry."

(1) Method Courses, to examine the major approaches to, and techniques for, the study of policy issues. The following courses are required:

Economics: 223 Microeconomic Theory.

Philosophy: 211 Moral Philosophy.

One course selected from the following:

Economics: 393 Econometrics.

Government: 219 Introduction to Research Methods for Political Science.

Mathematics: 231 Elementary Statistics and Regression Analysis.

(2) **Process courses,** to explore the processes by which public policies are designed, enacted, and implemented. The following courses are required:

Government: 317 The Policymaking Process.

At least one course each in economics and government selected from the following:

*Economics:* 312 Topics in Law and Economics; 332 Regulated Industries; 351 Public Finance. *Government:* 273 The American Congress; 275j The Committee System in the U.S. Congress; 276 The American Presidency; 313, 314 American Constitutional Law I, II; 392 Governing. (3) **Practical applications.** During the junior year, each student will complete an internship and, in consultation with program directors, will select a substantive policy area to serve as the focus for the senior research project. The internship may be undertaken during January, the summer, or an academic semester, and will culminate with a short research paper analyzing the issues to which the student was exposed.

(4) **The senior seminar.** Public Policy 493, required during the senior year, provides for independent, multidisciplinary student research. Each student is required to conduct an original analysis of some public policy issue.

**493 Public Policy Seminar** Students will design and conduct an original research project on a local, state, or national public policy issue. Required of economics and government majors with a minor in public policy; open to other government and economics majors on a spaceavailable basis. Also listed as Government 493. *Three credit hours*. MR. TIETENBERG

### Quantitative Analysis/ Applied Mathematics

Director, ASSISTANT PROFESSOR BEVERLY HAWK

ADVISORY COMMITTEE: Professors Hawk (Government), Homer Hayslett (Mathematics), Randy Nelson (Economics), Leonard Reich (Administrative Science), Dale Skrien (Mathematics), and John Sweney (English)

Because a significant portion of the world today is technically oriented, and quantitative arguments are being used in many areas of study, all liberally educated students should have at least minimum competency in quantitative reasoning. As a result, a Quantitative Analysis/ Applied Mathematics Program has been developed through a grant from the Sloan Foundation's New Liberal Arts Program and was included in the College's curriculum for the first time in 1986-87. The minor is offered as applied mathematics for students majoring in the Natural Sciences Division and quantitative analysis for students in all other majors. Students electing the minor must consult with their major adviser(s) as well as with the director of the Quantitative Analysis/Applied Mathematics Program concerning specific requirements. All requirements for the departmental or interdisciplinary major must be satisfied in addition to courses required for the minor. Students working to fulfill two majors should consult the director of the Quantitative Analysis/Applied Mathematics Program for specific requirements.

Requirements for the Minor in Quantitative Analysis

(1) Quantitative Analysis 491 or 492 is required in all majors.

(2) Quantitative Analysis 111 is required for majors in the humanities and social sciences divisions, unless prior coursework warrants an exemption from the director.

(3) Computer Science 113 or 115 is required in all majors except chemistry and biology.

(4) A statistics course selected from Mathematics 112, 231, 381-382 is required in all majors in the Humanities and Social Sciences divisions with the exception of the major in economics.
(5) In the Humanities Division and the departments of Philosophy and Religious Studies: one additional course selected from Computer Science 132, 231, Mathematics 117, 119, 121, 123, Philosophy 152, 258 (philosophy majors must take a course other than 152).

(6) In the Social Sciences Division, Government 294 is required for government majors who are honors candidates; History 294 for history majors; Psychology 371 for psychology majors. Majors in administrative science or sociology must take one course selected from Computer Science 132, 231, Mathematics 119, 121, 123, 272, Philosophy 152, 258 (Administrative Science 271 or 272 may be substituted by majors in that department). Economics majors must take two courses selected from Economics 336, 393, Mathematics 272. Government 219 is recommended for government majors.

(7) In the Natural Sciences Division, specific requirements for the minor also include: Biology majors must select one course from Mathematics 112, 231, 381, and two courses selected from Biology 352, Chemistry 331, 341, Geology 271, Mathematics 272, or Psychology 214. Chemistry majors must take Mathematics 253 and either 124 or 212, and two courses selected from Computer Science 115, Mathematics 231, 311, 332, 352, or 381-382. Geology majors must take either Mathematics 231 or 381-382, and may choose one course from Geology 333, 336, Mathematics 272. Mathematics majors must take Mathematics 272, 311, 372, 381-382, and one

course from another discipline in which mathematical skills are applied, i.e., Administrative Science 372, Economics 336, 393, Physics 321. Physics majors must take three courses in computer science or in mathematics courses numbered 300 or above.

(8) Normally, students with interdisciplinary majors will follow the Humanities Division requirements for the minor. Students with combined majors should consult the director of the Quantitative Analysis/Applied Mathematics Program for the requirements for the minor.

111j Introduction to Quantitative Analysis Introduction to mathematical concepts and quantitative methods in the context of their application to contemporary issues. Designed to demonstrate the persuasiveness of mathematics in today's world; topics vary from year to year but may include statistics, operations research, social choice theory, computing, and growth modeling. *Three credit hours*. MR. WHITTINGHILL

**491, 492** Independent Study This course is intended to provide students with experience in the use of quantitative skills. Wherever applicable, the course work should be tied to the student's major discipline. *Prerequisite:* Approval of the director of the Quantitative Analysis/ Applied Mathematics Program, and permission of the instructor. *One to three credit hours*. FACULTY

### **Religious Studies**

#### Chair, ASSOCIATE PROFESSOR DEBRA CAMPBELL

Professor Thomas Longstaff<sup>1</sup>; Visiting Professor Deane Ferm<sup>2</sup>; Associate Professor Campbell; Assistant Professor Nikky Singh; Visiting Assistant Professor Neal Walls

The study of religion in a college curriculum involves the historical and comparative scrutiny of the world's religious traditions: Christianity, Judaism, Islam, Buddhism, Hinduism, Confucianism, Sikhism, and Shinto. Inevitably, the examination of basic questions about religion, such as the existence and nature of God, religious experience, and the role of religion in society, are central to the discipline.

### Requirements for the Major in Religious Studies

A minimum of ten courses, exclusive of Religious Studies 498, are required for the major in religious studies. These must include one two-semester sequence of courses from the six courses which survey the major religions of the world (211, 212; 215, 216; 233, 234); at least one semester in each of the other two sequences of courses; Religious Studies 316 (or alternate course from a list of approved courses in contemporary religion); and a culminating seminar (which must be taken in the second semester of the senior year in conjunction with (a) a course of independent study leading to a major essay, (b) an honors program in religious studies, or (c) a senior scholar's program in religious studies). The elective courses should be chosen in consultation with faculty advisers to achieve a broad cross-cultural survey of religion or a study of religion with a particular concentration or focus.

Requirements for the Major in Philosophy-Religious Studies Religious Studies 211, 212, 233, 234, 316, Philosophy 152, 211, 331, 332, 372, 373, either Philosophy 491 or 492 or Religious Studies 491 or 492.

The point scale for retention of each of the above majors applies to all courses that count toward the major.

#### Honors Program

Students majoring in religious studies or philosophy-religious studies, who have a grade point average of 3.0 or higher in the major, may apply during the junior year for admission to the honors program. On successful completion of the work for the honors program, including a

thesis, their graduation from the College will be noted as being "With Honors in Religious Studies" or "With Honors in Philosophy-Religious Studies."

<sup>1</sup>On leave full year. <sup>2</sup>Part-time.

**†[115]** Perception and Misperception: An Introduction to Religion An examination of some of the major religions of the world as they are depicted in films and in selected classic religious texts. The goal of the course is three-fold: to provide a broad, comparative perspective on religious diversity, to introduce students to the specific questions and methodologies that are central to the academic study of religion, and to explore the ways in which formal and popular perceptions of religion differ. The structure of the course combines films, discussions, lectures, and short papers. Enrollment limited. *Four credit hours*.

116 Quest and Question: An Introduction to World Religions A broadly cross-cultural and comparative exploration of the religions of the world in their geographical and temporal contexts. The religions of the Middle East, of Europe and Asia, as well as the indigenous religions of Africa and the Americas. *Four credit hours*. MR. WALLS

117d2 A Passage to India: India and the Western Imagination Beginning with Walt Whitman's romantic journeys toward the "soul" of the universe, the course will attempt to study Western attitudes towards India and India's encounter with Western culture in return. Literature and film will be the medium of this course's journey; works include Salam Bombay, Siddhartha, The Razor's Edge, Heat and Dust, and Baumgartner's Bombay. Three credit hours. MS. SINGH

**†**[118] Introduction to Archaeology A first course in the principles and practice of field archaeology, examining both the theories and methods of modern, scientific excavation. Attention will be given to the importance of proper recording techniques as well as the tools and technology which contribute to successful excavation. Reference to both classical (especially biblical) and new world archaeology will be made. Enrollment for four credits will involve excavation at a Colby site and other exercises designed to allow students to develop archaeological skills. *Three or four credit hours*.

[119j] From Prophets to Profits An examination of televangelism, its history and present and future prospects, beginning with the roots of televangelism in the revivals and camp meetings of the nineteenth century and in the Christian "self-help" literature popular in America since publication of Hannah Whitall Smith's *The Christian's Secret of a Happy Life* (1875). The course includes the pioneer televangelists, Billy Graham, Rex Humbard, Oral Roberts, and focuses on the televangelistic techniques of Jerry Falwell, Robert Schuller, Pat Robertson, Jim Bakker, and others, in an effort to understand their theologies, their popular appeal, and their political influence. *Three credit hours*.

[201, 202] Biblical Hebrew Although biblical languages are not offered as regularly scheduled courses, it is possible for students to study biblical Hebrew. Completion of both semesters is required to earn academic credit. Enrollment limited. *Prerequisite*: Permission of the instructor. *Three or four credit hours*.

[203, 204] New Testament Greek Although biblical languages are not offered as regularly scheduled courses, it is possible for students to study New Testament Greek. Completion of both semesters is required to earn academic credit. Enrollment limited. *Prerequisite*: Permission of the instructor. *Three or four credit hours*.

211 Religions of India A study of Hinduism, Buddhism, Jainism, and Sikhism with a focus upon their religious texts and the cultural context within which they developed. An examination of the relationship these religious traditions have to one another, their metaphysical understanding of reality, their theories of the self, and their views of the social—as expressed in ritual, myth, and poetry. Four credit hours. MS. SINGH

212 Religions of China and Japan An examination of Confucianism, Taoism, and Shinto—the indigenous religions of China and Japan; tracing the entrance of Buddhism into China and Japan and the resulting transformation of this religion in its interaction with these civilizations. The political ideology of Confucianism, the mystical dimensions of Taoism, the mythological aspects of Shinto, and the meditative experiences of Buddhism (haiku, swordsmanship, and the tea ceremony, etc.). Four credit hours. MS. SINGH

[213j] Contemporary Asian Ideas and Values The impact of modernity upon the civilizations of India, China, and Japan as reflected in religion, art, philosophy, economics, and politics, focusing on the study of the presence of the past in the conflicts and ambiguities of the present situation. *Three credit hours*.

[214] Religion, Magic, and Witchcraft Listed as Anthropology 214 (q.v.). Prerequisite: Anthropology 112. Three credit hours.

**215** The Heritage of Western Religion I A historical overview of the development of Western religion from the third to the sixteenth century; the transformation of the Christian religion from a persecuted, underground religion to an institution sanctioned by the state, and the growth of that institution through the Middle Ages and into the early modern period; theological developments, popular religious movements, and the experience and contributions of Jewish and Muslim communities in the West. *Four credit hours*. MS. CAMPBELL

**216** The Heritage of Western Religion II A historical overview of the development of Western religion from the sixteenth century to the present; the variety of ways in which individual believers, congregations, and ecclesiastical authorities have articulated what it means to be religious in different social contexts from pre-Reformation Germany to modern Latin America. *Four credit hours*. MR. FERM

\*217d2 Religion in America A survey of the religious components of American history as they are related to the broader aspects of American culture. Attention will be given to the beliefs and practices of Protestantism, Catholicism, and Judaism and to the issues, past and present, that are important for understanding religion in America. *Three or four credit hours*. MS. CAMPBELL

[218] Buddhist Literature in Asia A study of Asian story anthologies, biographies, epics, novels, plays, poems, and sermons inspired by Buddhism in India, Tibet, China, Japan, Sri Lanka, and Burma; the diverse relationships between religious intentions and literary form. Three credit hours.

[219j] The Bible and Social Inequality Listed as Sociology 219j (q.v.). Prerequisite: Permission of the instructor. Three credit hours.

[232] Western Spirituality In contrast to theology (formal discourse about God and divine-human relations), the field of spirituality focuses upon the specific efforts of individuals to achieve communion (or even union) with God. This course seeks to display the variety of

ways that "ordinary people" and famous mystics within the Judeo-Christian tradition have sought to nurture close relations with God. It covers the period from the rise of Christianity through the present day. *Three credit hours*.

**233 Biblical Literature I** An introduction to the Hebrew Bible and Old Testament in terms of their historical context, original meaning, and significance in the contemporary world. The narratives, prophecies, and other literary forms are studied against the background of the history of Israel in order to understand broadly the culture of the people for whom this literature became normative scripture. *Three or four credit hours*. MR. WALLS

**234** Biblical Literature II Intended as a sequel to Religion 233; an introduction to the specifically Christian scriptures (the Old Testament Apocrypha and the New Testament). Beginning with the intertestamental period, an exploration of the literature which reflects the background and earliest stages of the Christian movement. Attention is given to the historical and cultural context of the literature, the development of early Christian theology, and its significance for the contemporary world. Three or four credit hours. WALLS

†[235] Sociology of Religion Listed as Sociology 235 (q.v.). Three credit hours.

**†[251]** Religion and Art The different theories of the relation between religion and art as reflected in ancient, medieval, and modern philosophers of art and in the religious traditions of East and West. Selective works of Plato, Aquinas, Tolstoy, Clive Bell, Coomaraswamy, and al-Faruqi will be studied. Architecture, literature, symbols, arabesque, and iconography from the different religious traditions will be aesthetically encountered. *Three credit hours*.

**†[252] Village India** The unity and diversity of myths, rites, festivals, social practices, and domestic activities as embodied in the life of a north Indian village. The village will also serve as a mirror through which to examine the relationship between ancient Indus Valley civilization and modern India. *Three credit hours*.

**†[253]** The Middle East The ideal of separation of church and state, widely taken for granted in modern Western nations, is not characteristic of the Middle East. This course will examine similarities and differences among the three major religions of the Middle East (Judaism, Christianity, and Islam) and explore ways in which religion is an important factor in almost all areas of life. Employing films, readings, and material from contemporary news media, the course provides both an overall survey and an opportunity to explore in depth topics of individual interest. Three or four credit hours.

[254] Islam and the Middle East An introduction to Islam, beginning with Muhammad and the Qur'an and exploring the major beliefs, practices, and institutions of this religion. Consideration will be given to the diversity within Islam (e.g., Sunni, Mu'tazilite, Sufi, Shi'ite, etc.) aswellas to its general characteristics. Attention will be given both to Islam in its formative period and to Islam as a dominant religion in the contemporary Middle East. Enrollment for an optional fourth credit provides students an opportunity to explore in depth some topic of individual interest. Three or four credit hours.

255 The Goddess: A Hermeneutics in Thealogy An exploration of some eastern and western visions of divinity through feminine imagery and symbolism. The hermeneutic process entails a discovering and reimagining of the Goddess' multi-dimensionality in art and literature. The objective is to appreciate the variety and complexity of the sacred in figures such as Sarasvati, Durga, Inanna, Athena, Aphrodite, Mary, Kuan Yin, Amaterasu. What powers do

these goddesses manifest individually? How do creative, nurturing, and destroying elements combine in them? What validations do they offer society? What new dimensions of feminine life do they release? How does theology differ from thealogy? Formerly listed as Religion 392. Four credit hours. MS. SINGH

**†[257]** Women in American Religion The changing role of women in American religious movements from the seventeenth century to the present, focusing on the experiences of "famous" women, e.g., Ann Hutchinson, the Salem witches, Mother Ann Lee, the Grimke sisters, Frances Willard, Elizabeth Cady Stanton, Dorothy Day, Mary Daly, as well as the experiences of "anonymous" women in Protestant, Roman Catholic, Jewish, and selected utopian communities. The ongoing struggle for women's ordination and women's equality within organized religion and the recent efflorescence of feminist theologies. *Three credit hours*.

**259j** The Catholic Church in the Modern World An examination of the Roman Catholic Church during the past century with special emphasis upon the ferment of the past quarter century; the documents of Vatican II, the emergence of Third World liberation theologies, and the evolution of Catholic teachings on sexuality, nuclear weapons, economic affairs, and the role of women in the church. *Three credit hours*. MS. CAMPBELL

[277, 278] Religious Perspectives Interdisciplinary considerations of various topics. Three credit hours.

**297 Anatomy of the Sacred** A multi-disciplinary approach to the academic study of religion and religious phenomena such as myth, ritual, religious organization, and belief in the supernatural. Classic definitions and explanations of religion provided by anthropologists, sociologists, psychologists, and theologians will be examined, as well as more recent theoretical discussions of the nature of religious belief and practice. Particular emphasis to the analysis of religion within its own categories rather than as a sub-group of some other discipline. The traditions of World Religions, "primitive" religions, and modern sects allowing broad discussion of the significance of contrasting experiences of the sacred. *Four credit hours*. MR. WALLS

[314] Religion in Modern India Rural and urban forms of religion in present day India: novels, anthropological accounts of village life, debates between learned religious specialists, and folk literature. Focus on the role of karma, notions of "caste," and the effects of modernization on religion. *Prerequisite*: Religious Studies 211 or permission of the instructor. *Three credit hours*.

[315] Zen Buddhism This Japanese school of Mahayana Buddhism is studied through the historical roots of Indian mysticism and Chinese naturalism, the establishment of Rinzai and Soto schools, the philosophical and psychological idea of "no-mindedness," and the relationship of Zen with visual and aural arts. *Three credit hours*.

\*316 Seminar: Contemporary Western Theology Following a brief recapitulation of early twentieth-century theology, the course provides an intensive study of the significant theological developments (Protestant, Catholic, Jewish, and neo-pagan) since mid-century, including the "death of God," evangelical, process, black, womanist, and feminist theologies, and a variety of liberation theologies from Africa, Asia, Latin America, and North America. *Prerequisite*: Religious Studies 215 or 216 or permission of the instructor. *Three credit hours*. MR. FERM

**†[317]** Sikhism: Scripture, Sacred Music, and Art The Guru Granth Sahib, the Sikh bible, forms the focal point for the literature of the Sikhs as well as other aspects of their culture

and values. The seminar will outline its artistic and metaphysical dimensions including the reasons why it is considered a colossus in both Punjabi and world literature. Three credit hours.

[351] Reflections of Evil: A Study of the Book of Job Can "personal religion"—the view that human beings are the objects of divine creation, nurture, guidance, and protection—survive the challenge of the experience of persistent evils in the world? This central question in the biblical book of Job, and one which has troubled men and women in every generation, is the focus of study of the book of Job in its historical and religious context; exploration of wider themes, including the relationship of the book to other literature in which the "problem of evil" is considered. *Prerequisite*: Religious Studies 233 or permission of the instructor. *Three credit hours*.

**†[352]** The Theology of Paul Early Christian theology was more often shaped by the heat of controversy than by the calm analysis of theological reflection. Paul's letters, and the controversies that prompted them, will be studied as a basis for understanding Pauline theology, its relation to other elements of first-century religion, and its influence on later Western thought. *Prerequisite*: Religious Studies 234. *Three credit hours*.

**353** The Great Prophets of Israel An intensive study of several of the Old Testament prophets, their lives, and messages. The course will consider each prophet's impact on his own times, and will raise the question of the importance of prophecy in ancient and modern times. *Prerequisite:* Religious Studies 233. *Three credit hours.* MR. WALLS

**356** The African-American Religious Experience Listed as Sociology 356 (q.v.). Prerequisite: An introductory sociology or anthropology course or American Studies 274 or 276 or Religious Studies 217 or permission of the instructor. Three credit hours. MS. GILKES

[358] Jesus of Nazareth An intensive study of the life and teachings of Jesus, employing the methods of gospel study developed in the nineteenth and twentieth centuries. The course will examine the canonical and extracanonical literature about Jesus, including recent studies of these materials. Attention will be given to the importance of the "quest for the historical Jesus" for contemporary Christianity. Open to first-year students and sophomores with permission of the instructor. *Prerequisite:* Religious Studies 234. *Three credit hours*.

[372] Philosophy of Religion Listed as Philosophy 372 (q.v.). Three or four credit hours.

[373] History of Medieval Philosophy Listed as Philosophy 373 (q.v.). Three or four credit hours.

[391], 392 Seminar: Eastern Mysticism: Voices, Metaphors, and Symbols A study of the ineffable character of mysticism, its power to transform lives, and its concreteness within particular historical, social, psychological, aesthetic, and metaphysical dimensions. Is mysticism a state of consciousness, discipline, an art, or a quality of living? Both the mystical writings and works of art from the East—especially from the Hindu, Sufi, Sikh, Taoist, and Zen traditions—to understand the aural or visual text within its context and the usage of specific imagery and mataphors. Emphasis on female voices of mystics, including Ra'bia and Mira Bai, and the usage of feminine symbolism and imagination in the encounter with the Other. Three credit hours. MS. SINGH

**†[398]** Biblical Images in American Literature A team-taught examination of selected works of American literature, including short stories, novels, poetry, and drama. Emphasis on

the manner in which the authors studied made use of biblical characters, themes, and narratives, as well as their purposes for including such material. The place of myth, symbol, and imagery in American thought and culture. *Three credit hours*.

483, 484 Religious Studies Honors Program Majors may apply late in their junior year for admission into the Religious Studies Honors Program. These courses require research conducted under the guidance of a faculty member and focused on an approved topic leading to the writing of a thesis. Upon successful completion of the thesis and the major, the student will graduate "With Honors in Religious Studies." Enrollment limited. *Prerequisite:* Senior standing and a 3.0 grade point average in the major at the end of the junior year. *Three credit hours*. FACULTY

**491, 492** Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor. *One to four credit hours*. FACULTY

**494** Senior Seminar A culminating seminar for senior religious studies and philosophyreligious studies majors, as well as non-majors enrolled in a senior scholar program in religious studies. The seminar provides a format for students to discuss topics of mutual interest and to present the results of their research. One credit hour. FACULTY

## Romance Languages and Literatures

Courses offered by the Department of Romance Languages and Literatures are listed separately under "French," "Italian," "Portuguese," and "Spanish."

Chair, ASSOCIATE PROFESSOR JORGE OLIVARES

Professors Francisco Cauz, Guy Filosof, Jonathan Weiss, Jane Moss, and Arthur Greenspan; Associate Professors Charles Ferguson, Priscilla Doel, Olivares, and Suellen Diaconoff; Assistant Professors Javier Gonzalez-Alonso, Adrianna Paliyenko, Silvia Bermudez, and Betty Sasaki; Visiting Asistant Professor Abbes Maazaoui; Instructors Barbara Nelson and Dace Weiss; Visiting Instructors Francis Bright, Nancy Meader, and Alan Davison

The programs in Romance languages are designed to bring students into close contact with the products of imagination and inquiry of other cultures; at the same time, the study of foreign languages and literatures heightens one's awareness of one's own culture. Students have the opportunity to study in a wide variety of areas, some interdisciplinary, to participate in one of Colby's language semester programs in Mexico or France, and to spend their junior year abroad either at Colby's programs in Caen or Salamanca or at approved programs in other countries. Like most liberal arts majors, the study of foreign languages should be considered as a background leading to a wide variety of careers. Some students go on to pursue advanced degrees in languages and literatures. When languages are combined with course work in history, government, economics, or the natural sciences, career possibilities in law, medicine, business, and government are enhanced. Prospects for teaching languages are somewhat limited, but needs do exist in certain areas.

*Note:* Majors are offered in French and Spanish; the department also offers instruction in Italian and Portuguese.

[399] Teaching of Foreign Languages Problems and methods of teaching foreign languages. Readings, discussions, practice-work, and criticism. Open to students with a minor in education. Nongraded. *Prerequisite*: Two 200-level foreign literature courses. *Three credit hours*.

### Russian

### In the Department of German and Russian.

Associate Professor Sheila McCarthy; Assistant Professors Anthony Anemone and David Hanson; Visiting Instructor Vivian Pyle

Students interested in Russian and Soviet affairs are invited to consider a major in Russian and Soviet studies or a minor in Russian language and literature.

Requirements for the Minor in Russian Language and Literature

- (1) Russian language courses: 125, 126, 127, 128.
- (2) Russian literature surveys in translation: 237, 238.

(3) Russian literature in the original: Russian 325 or 326.

125, 126 Elementary Russian Students in this course will acquire an overall knowledge of the structure of the Russian language and will develop skills in spoken Russian, listening comprehension, and reading and writing basic Russian. In addition to the textbook and language laboratory, the course will make use of Soviet television as an aid in understanding both the Russian language and the cultures of the Soviet Union. Russian 125 is prerequisite for 126. Four credit hours. FACULTY

127, 128 Intermediate Russian The course places increased emphasis on reading and writing skills, while continuing to supplement texts with Soviet television and other audiovisual aids to increase oral and listening skills in Russian. *Prerequisite*: Russian 126 or permission of the instructor; Russian 127 is prerequisite for 128. *Four credit hours*. FACULTY

[231], 232 Topics in Russian Literature Topics, which change every year, may cover an author, a genre, or a theme central to Russian literature of the nineteenth and twentieth centuries. In 1992: the major works of Anton Chekhov. Readings, lectures, discussions of the stories and plays with particular emphasis on the social and intellectual context of late Imperial Russia and on Chekhov's influence on modern European and American literature. Conducted in English, no knowledge of Russian required. *Four credit hours*. MR. ANEMONE

[237] Nineteenth-Century Russian Literature Lectures and discussions of representative works in prose by Pushkin, Gogol, Lermontov, Goncharov, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Conducted in English, no knowledge of Russian required. *Four credit hours*.

**238 Twentieth**-Century Russian Literature Close readings of works by such major writers as Sologub, Bely, Mayakovsky, Gorky, Babel, Bulgakov, Zamjatin, Olesha, Pasternak, and Solzhenitsyn. Readings and discussion in English, no knowledge of Russian required. *Four credit hours*. MS. MCCARTHY

**239j** Russian Utopian and Science Fiction Through close readings and discussions of representative works of the nineteenth and twentieth centuries, an examination of various versions of Russian utopian and science fiction: the conflict between nostalgic, peasant utopias and the technological utopia of the workers; Dostoevsky's religious critique of Utopia; Soviet anti-utopian texts and the Russian Revolution; Soviet science fiction of the Brezhnev era. *Three credit hours*. MR. ANEMONE

325, 326 Conversation and Composition Grammar review and continued practice in oral and written expression. Reading and analysis of literary and historical texts from the nineteenth

century. Original audio-visual taped materials supplement the readings. Conducted in Russian. *Prerequisite:* Russian 128 or permission of the instructor; Russian 325 is prerequisite for 326. Four credit hours. MR. ANEMONE AND MS. MCCARTHY

**425** The Russian and Soviet Short Story Lectures, readings, and discussion of representative Russian short stories from the nineteenth and twentieth centuries; weekly compositions in Russian, continued work in fine points of Russian grammar, audio-visual materials. Conducted entirely in Russian. *Prerequisite*: Russian 326 or permission of the instructor. *Four credit hours*. MR. ANEMONE

**426** The Russian Novel An analysis of Boris Pasternak's *Dr. Zhivago*. Issues include the life and times of Pasternak; the political, social, and historical context of the novel; the scandal over the Nobel Prize for Literature. Conducted entirely in Russian. *Prerequisite*: Russian 425 or permission of the instructor. *Four credit hours*. MS. MCCARTHY

**491, 492** Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. *One to three credit hours*. FACULTY

# Russian and Soviet Studies

### Director, ASSISTANT PROFESSOR ANTHONY ANEMONE

ADVISORY COMMITTEE: Professors Anemone (German and Russian), David Das (History), David Hanson (Computer Services, German and Russian), Charles Hauss (Government), Michael Martin (Economics), Sheila McCarthy (German and Russian), and Vivian Pyle (German and Russian) Russian and Soviet Studies is an interdisciplinary major which permits students to study Russia and the Soviet Union from a variety of disciplinary perspectives, including language and literature, history, politics, and economics. Required and elective courses taken by majors in the departments of German and Russian Languages and Literature, History, Government, and Economics are supplemented by an interdisciplinary Russian Studies seminar for juniors and seniors. Students are encouraged to participate in extracurricular activities on the campus, including guest lectures and seminars, discussion group meetings, films, Russian table luncheons and dinners, and live Soviet television broadcasts, in order to gain a deeper understanding of the past, present, and future of the Soviet Union.

In addition to semester and summer study opportunities available in the U.S.S.R., students who have completed three years (or the equivalent) of Russian language study are eligible to participate in the American Collegiate Consortium's exchange program which offers a year of study (Junior Year Abroad) at a variety of Soviet universities and institutes. Students interested in this program should contact the Russian language faculty as early as possible in their first year.

Requirements for the Major in Russian and Soviet Studies Russian 237, 238, 325, 326, Government 253, History 261, 262, a seminar in Russian Studies, and four additional courses (three of which must be beyond the introductory level).

Courses Approved for the Major in Russian and Soviet Studies

Economics: 275 Comparative Economic Systems; 276 Marxian Economics.

Government: 239 The Nuclear Age; 253 Soviet Politics.

History: 251 East Central Europe; 261 Russian History, Ninth Century to 1881; 262 Russian History, 1881 to the Present; 472 Seminar in Russian and East European History.

Russian: 125, 126 Elementary Russian; 127, 128 Intermediate Russian; 231, 232 Topics in Russian Literature (in translation); 237 Nineteenth-Century Russian Literature (in translation); 238 Twentieth-Century Russian Literature (in translation); 239 Russian Utopian and

Science Fiction; 325, 326 Conversation and Composition; 425 The Russian and Soviet Short Story; 426 The Russian Novel.

Russian and Soviet Studies: 113j Introduction to Russian Culture; 139j January in the Soviet Union; 393, 394 Seminar in Russian and Soviet Studies; 491, 492 Independent Study.

Majors are encouraged to pursue intensive language studies during summers and to participate in a summer, semester, or year-long study program in the U.S.S.R.

The point scale for retention of the major applies to all courses offered toward the major. No requirements for the major may be taken satisfactory/unsatisfactory.

Students interested in Russian and Soviet Studies are invited to consider the minor in Russian language and literature. For information, consult the chair of the Department of German and Russian.

[113] Introduction to Russian Culture A text-based approach to the study of central themes in Russian history, art, and religion. With lectures, discussions, readings, and films, the course will follow several themes from ancient times into the twentieth century. *Three credit hours*.

**139j** January in the Soviet Union A three-week study tour of the Soviet Union. Topics, which vary from year to year, may include political and social affairs, Russian and Soviet culture, art, and architecture. *Three credit hours*. MS. MCCARTHY

**394d1** Seminar in Russian and Soviet Studies The Russian Revolution and Soviet culture, an interdisciplinary study of the seminal event of Russian history in the twentieth century, the Revolution of 1917. Themes and issues that have determined the shape and development of Soviet culture, including the powerful influence of utopian thought and action on the generation that experienced the revolution first hand, and the process by which this utopian energy was transformed into the stagnant, bureaucratic, and inhuman culture of Stalinism. *Prerequisite:* Permission of the instructor (History 261, 262 and Russian 237, 238 are highly recommended). *Four credit hours*. MR. ANEMONE

491, 492 Independent Study Individual interdisciplinary projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor. *Two to four credit hours*. FACULTY

### Science-Technology Studies

#### Director, ASSISTANT PROFESSOR JAMES FLEMING

ADVISORY COMMITTEE: Professors Charles Bassett (English and American Studies), Murray Campbell (Physics and Astronomy), F. Russell Cole (Biology), Frank Fekete (Biology), Fleming (Science-Technology Studies), Henry Gemery (Economics), Jonathan Hallstrom (Music), Beverly Hawk (Government), Thomas Longstaff (Religious Studies), Randy Nelson (Economics and Administrative Science), Leonard Reich (Administrative Science), and Dale Skrien (Mathematics and Computer Science)

Science and technology have become increasingly important components of our world, changing the ways we live, work, and think. The well-being of individuals, nations, and, ultimately, our earth depends in part on technical developments that often transform both the social and natural environment.

By choosing from a variety of electives, the Science-Technology Studies program provides students with historical, philosophical, sociological, economic, political, and technical perspectives on the complex interactions of science, technology, and society. Students gain an understanding of the human and social dimensions of science and technology; they also become better-informed citizens of our high-tech society.

Students from all majors may elect the minor in science-technology studies. Students may also design an independent major in this field.

### Requirements for the Minor in Science-Technology Studies

The minor comprises six courses. Two of them, "Introduction to Science-Technology Studies" and "Senior Research Project," are required. Four other courses are chosen from the lists below, with the following restriction: non-laboratory-science majors are required to take at least one course from the list stressing scientific and technological methodologies and at least one course from the list emphasizing historical and/or social issues. Laboratory-science majors are required to choose two courses from the latter list. At least two of the elective courses must be at the 200 level or higher. No more than one independent studies or field experience may be included as an elective, and it must be taken for at least three credit hours. Students may petition to include elective courses not listed below.

In order to ensure that each student has taken a coherent program of courses, the minor must be declared and elected courses must be approved before the student has taken the third of four electives.

### Courses that deal with scientific and technological methodologies:

Biology: 219 Environmental Science; 493 Problems in Environmental Science.

Chemistry: 112 Chemistry for Citizens; 118 Biotechnology; 217 Environmental Chemistry. Geology: 172 Oceanography; 494 Environmental Geology.

*Physics*: 111 From Galileo to Einstein; 112 Energy for Planet Earth; 253 Essential Electronics. *Psychology*: 233 Physiological Psychology.

Science-Technology Studies: 152 Historical and Planetary Astronomy; 215 Atmospheric Science. Courses that deal with historical/social issues related to science and technology:

Administrative Science: 231 Technology, Corporate Strategy, and Competition; 251 Technology and Society in America; 252 Engineers and Engineering; 336 Business, Ethics, and Technology.

Economics: 493 Senior Seminar (when appropriate).

Government: 239 The Nuclear Age.

Psychology: 479 History and Systems of Psychology.

Science-Technology Studies: 213 Science and Technology in the Federal Government; 216 Aeronautics in America; 218 The American Home, 1792–1992; 271 Science in America; 332 Turning Points in the History of Science and Technology; 393 Seminar in Science-Technology Studies.

### Other related courses:

Administrative Science: 271 Decision Analysis.

Biology: 133 Impact of Microorganisms on Humanity (counts as 1/2 of an elective).

Computer Science: 115 Introduction to Computer Science; 132 Computer Organization and Assembly Language.

Economics: 231 Environmental and Natural Resource Economics.

Environmental Studies: 118 Environment and Society.

Music: 213 Introduction to Computer Music.

Psychology: 374 Human Neuropsychology.

Quantitative Analysis: 111 Introduction to Quantitative Analysis.

112 Introduction to Science-Technology Studies The interactions of science, technology, and society in lectures, readings, discussions, and field trips. The influence of science and technology on our lives, in the world around us, and throughout history. *Four credit hours*. MR. FLEMING

118 Environment and Society Listed as Environmental Studies 118 (q.v.). Four credit hours. FACULTY

[152] Historical and Planetary Astronomy A survey of the history of planetary astronomy from ancient times to the present, and a study of the solar system with emphasis on the discoveries of recent interplanetary space probes. May be counted toward the science distribution requirement, but not offered for laboratory credit. Three or four credit hours.

[213j] Science and Technology in the Federal Government The United States government became a major source of employment for scientists and engineers in the nineteenth and early twentieth centuries. Since World War II, this relationship has intensified into a permanent sci-tech establishment. The course examines the growth of this establishment, its accomplishments or lack thereof, and the ways policy decisions involving science and technology are made today. Readings and seminar discussions combined with a trip to Washington, D.C., for presentations at and tours of federal establishments involved in formulating policies for science and technology. Enrollment limited. *Prerequisite*: Permission of the instructor. *Three credit hours*.

**215** Atmospheric Science Comprehensive introduction to the earth's atmosphere: origin, composition, structure, general circulation, weather systems, climate, air pollution, ozone depletion, and climate change. May be counted toward the science distribution requirement, but not offered for laboratory credit. Enrollment limited. Formerly listed as Science-Technology Studies 113. Four credit hours. MR. FLEMING

[216] Aeronautics in America The perspectives of humanities, social sciences, and natural sciences in examining the history of flight in America. The social and economic consequences of aviation; flight as an intense human experience; and the science and technology of aerodynamics, navigations systems, etc. Formerly listed as Science-Technology Studies 298. Three or four credit hours.

**217j** The Automobile in America: History, Business, and Culture The development of the automobile and its impact on American life, from the Stanley Steamer and the Ford Model T to the Jeep and the 300ZX. Emphases will be placed on the evolution and influence of the automobile industry and on changing patterns of residence, commerce, and leisure. *Three credit hours*. MR. REICH

[218j] The American Home, 1792–1992: Design, Construction, and Use Three credit hours.

[271] History of Science in America A survey of the social, political, and institutional development of science in America from colonial times to the present. Topics include: scientists' roles in government, education, and industry; science in war; science, technology, and social issues; the evolution of environmental thought; and the emergence of America as a leading scientific nation. *Three or four credit hours*.

**291j** Research and Seminar in Science-Technology Studies Individual or small group work in topics related to the social, political, historical, philosophical, or practical dimensions of science and/or technology. Students will prepare a written proposal, present a seminar on the results of their project, and write a final report. *Prerequisite:* Permission of the instructor and approval of the program director. *One to three credit hours*. FACULTY

[332] Turning Points in the History of Science and Technology International perspectives

on the development of science and technology from the scientific revolution to the early twentieth century. The content of new theories, discoveries, and inventions will be presented in their social and cultural contexts with special attention given to trans-national comparisons. *Prerequisite*: Permission of the instructor. *Three or four credit hours*.

**393** Seminar: Technology, War, and Society The role of technology in warfare and the military's broader influence on society from antiquity to the Gulf War. Topics include military research and development, defense industries and domestic spin-offs, medical and surgical innovations, the rise of the national security state, high-tech electronic warfare, and issues of information and propaganda. Discussion, student presentations and paper, and a concurrent film series. *Prerequisite:* Permission of the instructor. *Four credit hours*. MR. FLEMING

**483, 484** Senior Research Project Students will design and complete a final integrative project in science-technology studies. Required of minors and open to others with the permission of the program director and the instructor. 483: Nongraded; *one credit hour.* 484: *three credit hours.* FACULTY

**491, 492** Independent Study Independent study in areas in which the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor and the program director. *One to four credit hours*. FACULTY

## Selected Topics

-97, -98 Study of Selected Topics Each department and interdisciplinary major may from time to time offer special courses not otherwise included in its regular course listing. When such a course is offered, it will be listed under the appropriate subject heading. The first digit of its number will depend on the level at which it is offered. Titles, descriptions, prerequisites, and number and type of credits will be determined by the department or interdisciplinary major offering the course, and will be available at registration.

## Social Science

**399 Teaching Social Studies** Theory and practice in teaching social studies. Open to students with a minor in education. May not be counted toward any major. Does not satisfy the distribution requirement in social science. Nongraded. *Three credit hours*. MR. KANY

## Sociology

In the Department of Sociology and Anthropology.

Chair, PROFESSOR THOMAS MORRIONE

Professors Jonas Rosenthal<sup>1</sup>, Morrione, and Sonya Rose; Associate Professor Cheryl Gilkes; Assistant Professors Adam Weisberger<sup>1</sup> and Christine Bowditch; Scholar-in-Residence Sarah Willie The curriculum in sociology introduces students to the discipline, especially to the interplay of sociological theory and sociological research. Courses in the department foster appreciation of such sociological concerns as social inequality, social change, social control, deviance, conflict, and the formation of identity. By conducting research for course projects, students learn that sociology is an empirically-based social science; they learn to do sociology as well as to read about how it is done. The major helps prepare students to deal with the world by providing them with a critical and humanistic perspective. For those considering graduate school, it offers a comprehensive background in theory, methods, and their application in a variety of subject areas of the discipline. After developing their own sociological perspective, students complete an independent research project which integrates their course work, their perspective, and their research findings.

Requirements for the Major in Sociology

Sociology 131, 215, 271, 381, 382, 493, and four additional sociology courses, totaling at least twelve hours (one course in anthropology at the 200 level or above may be substituted). Sociology 215 and 271 should be taken before the end of the sophomore year. Although Sociology 272 and 318 are not required, they are strongly recommended.

The point scale for retention of the major applies to all courses in anthropology and sociology. No requirement for the major may be taken satisfactory/unsatisfactory.

Requirements for the Minor in Sociology

Sociology 131, 215, 271, and at least three electives in sociology with two of the three at the 200 level or above and one of the three at the 300 level or above.

Sociology courses above the 100 level have limited enrollments.

<sup>1</sup>On leave full year.

**116j** Visions of Social Control An examination of deviance, dissent, and social control in Utopian societies as depicted in selected novels, to illuminate social processes in contemporary societies. Police surveillance, propaganda, legal segregation, political repression, bureaucratic regulation, and biological or psychological manipulation as means of maintaining social order and controlling deviance. Enrollment limited. *Three credit hours*. MS. BOWDITCH

[117j] Introduction to Yiddish Language and Culture An intensive, multi-media approach to the world of Eastern European Jewry before the Nazi Holocaust; instruction in the Yiddish language; discussion of various aspects of Jewish culture, using literature, music, art, and film. Three credit hours.

131d Principles of Sociology A social scientific analysis of society and human activity, focusing on the nature of institutions, the social construction of reality, and the meaning of freedom in the social world. Concerns include socialization, alienation and marginality, social change, and social issues of race, gender, power, authority, inequality, self, and identity. *Four credit hours*. MR. MORRIONE AND MS. BOWDITCH

151j Beyond the Canon: Sociology in Women's Writing Parting from tradition, the course will explore the works of extraordinary American and English contemporary female scholars who have not been trained as sociologists. The importance of perspective in labeling social "truths" and in deciphering social patterns. Close reading of texts for social significance, literary appreciation, and personal relevance. Enrollment limited. *Three credit hours*. MS. WILLIE

[214j] The African-American Elites and Middle Classes Utilizing classical and contemporary sociological theories of stratification and race relations, the course explores the intersection of class and race-ethnicity in the social origins and historical roles of elites and middle classes in the African-American experience. Particular attention to the writings of DuBois, Frazier, Cox, and Wilson. Biographical and autobiographical perspectives will provide rich description of socialization, family contexts, work, politics, ideologies, and the impacts of

### 174 SOCIOLOGY

racism and social change. *Prerequisite*: Sociology 131, 231, American Studies 276, or permission of the instructor. *Three credit hours*.

215 History of Sociological Theory The history of sociology, and a critical survey of the systems of thought about society, centered on major schools of sociological theory and their representatives. The place of theory in social research as presented in works of major social theorists. *Prerequisite:* Sociology 131. *Three credit hours*. MS. BOWDITCH

[219j] The Bible and Social Inequality The course explores the importance of gender, political organization, nationality, and economic position within the Bible and the biblical world and then examines the social and cultural importance of the Bible in issues of gender, race-ethnicity, class, and power in the United States. *Prerequisite*: Permission of the instructor. *Three credit hours*.

**231** Contemporary Social Problems Analysis of selected controversial issues and public problems in the contemporary United States. General theoretical frameworks in the sociology of social problems used to analyze issues from one or more perspectives; areas include alienation, economic and political freedom, the politics of morality, poverty, women's roles, and social inequality. *Prerequisite:* Sociology 131 or permission of the instructor. *Three credit hours*. MS. GILKES

**233** Crime in American Society An exploration of the nature, causes, and solutions to crime in American society; the definition of crime; how police practices, official statistics, and media coverage influence the public's knowledge of and reaction to crime; the social, economic, and political contexts of criminal behavior; and criminal justice policies. Enrollment limited. *Prerequisite:* Sociology 131. *Four credit hours*. MS. BOWDITCH

[235] Sociology of Religion A survey and overview of religion as a social phenomenon and an object of sociological analysis. Topics include theoretical perspectives, research strategies, the problem of meaning and moral order, and religion as a group phenomenon involving social conflict, social organization, social class, race-ethnicity, gender relations, politics, popular culture, and public problems such as pluralism, innovation, secularization, religious economy. *Three credit hours*.

**238** The School in American Society An exploration of the sources of and historical background to dissatisfaction with contemporary schools, the mission of schools, the role of schools in relation to other social institutions, the social organization of teaching and learning, and the experiences of students. Enrollment limited. *Prerequisite:* Sociology 131. *Four credit hours*. MS. BOWDITCH

**252d1** Race, Ethnicity, and Society The role of intergroup conflicts, ethnic antagonisms, and racism in culture and social structure in the United States; topics include ethnic community experiences, immigration, enslavement, prejudice and discrimination, social movements, pluralism, and comparative perspectives. *Prerequisite:* Sociology 131. *Three credit hours*. MS. WILLIE

271d2 Introduction to Sociological Research Methods Introduction to a variety of research methods employed by sociologists. Topics include problem definition, the logic of inquiry, the relation between theory and research, research design, sampling, and techniques for data collection and analysis. *Prerequisite:* Sociology 131. *Four credit hours*. MS. ROSE

[272] Advanced Research Methods Student-initiated research investigation using quan-

titative methods of data collection and analysis. Manipulation of quantitative data using the computer, basic statistical analysis, interpretation of statistical results, and integration of empirical findings into sociological theory. *Prerequisite:* Sociology 271 and permission of the instructor. *Three credit hours*.

[273] The Family Changes in the family and its relationship to other institutions in society are examined using a sociohistorical perspective. *Prerequisite:* Sociology 131. *Four credit hours*.

[274] Social Inequality and Power Using a historical and sociological orientation, the course examines how structured inequalities are socially created, and the social consequences of inequality. *Prerequisite:* Sociology 131 or permission of the instructor. *Three credit hours*.

[275j] Social Situations: Everyday Life An introduction to issues, problems, and strategies relating to the observation and analysis of human interaction in natural social settings. A social-psychological perspective is developed through discussion of first-hand field experience and participant observation in a variety of settings. *Prerequisite:* Sociology 131 and permission of the instructor. *Three credit hours*.

**276d1** Women and Men in Society The behaviors expected of people because of their sex and differences in the status of men and women in society will be examined using a sociohistorical perspective. Theories accounting for gender differences will be analyzed, and the consequences of gender inequality in contemporary society will be explored. *Prerequisite:* Sociology 131. *Four credit hours*. MS. ROSE

277d2 Sociological Social Psychology An analysis of major social psychological views of human behavior, with special emphasis on the works of George Herbert Mead and Herbert Blumer. Human group life, social behavior, self, situations, and society examined from a symbolic interactionist point of view. *Prerequisite:* Sociology 131. *Four credit hours*. MR. MORRIONE

[292] Social Change Beginning with an examination of the concept of social change, the course will focus on the changes in American life and value systems viewed from a variety of perspectives advanced by some of the theorists of change. Enrollment limited. *Prerequisite*: Sociology 131. *Four credit hours*.

**298** Medical Sociology Application of sociological principles to the medical care system, its institutions and personnel, focusing on the hospital as a social and bureaucratic organization; recruitment and training of health care providers; practitioner-patient relationships; also social epidemiology, mental disorders, history of medicine and public health, death and dying. *Four credit hours*. INSTRUCTOR

[315] Politics and Society A survey of sociological perspectives on politics and political processes. Topics include state theory, political parties, the politics of production, social movements and ideology. Enrollment limited. *Prerequisite:* Sociology 131. *Four credit hours*.

**316d1** Special Topics in Sociology Selected topics to be announced. In 1991: An examination of both printed and visual media and the ways they construct interpretations of ourselves and the world around us in newspapers, magazines, television, and film. Theories of representation and ideology; the consequences of media images of race and gender. Seminar format. Enrollment limited. Formerly listed as Sociology 216. *Prerequisite:* Sociology 131. *Four credit hours*. MS. ROSE

### 176 SOCIOLOGY

**318** Contemporary Theory An analysis of the contemporary state of sociology as a discipline. Special attention given to critical theory, phenomenology, ethno-methodology, symbolic interactionism, and existential sociology. *Prerequisite:* Sociology 131 and permission of the instructor. *Three credit hours*. MR. MORRIONE

[332] Industry and Occupations Work is an activity that consumes a good portion of most people's lives. Using a historical and comparative approach, this course will focus on the changing meaning of work and on changes in the occupational structure, work settings, and the organization of work. *Prerequisite:* Sociology 131. *Four credit hours*.

**334** Social Deviance Definitions of deviance and theories of explanation and analysis of deviant behavior. Readings and discussions will emphasize the history and development of contemporary perspectives. Enrollment limited; seniors and majors given preference. *Prerequisite:* Sociology 131 and permission of the instructor. *Three credit hours*. MR. MORRIONE

**355** African-American Women and Social Change Sociological analysis and historical overview of African-American women and their families, work lives, and community (especially religious and political) experience. A focus is on the contradictions between lived experience and cultural expectations surrounding gender, and to the distinctive experiences of African-American women as a force for social change. Enrollment limited. *Prerequisite:* An introductory social science course or American Studies 274 or 276. *Four credit hours.* MS. GILKES

**356** African-American Religious Experience A sociological analysis and historical overview of the diverse religious organizations, leaders, experiences, and practices of black people in the United States. Emphasis on the predominant Afro-Christian experience, its relationship with the African background, contemporary African religions, other religion (e.g., Islam), political institutions, social change, urban problems, and the arts. Special attention to the role of black Christian women in church and society. *Prerequisite:* An introductory sociology or anthropology course or American Studies 274 or 276 or Religion 217 or permission of the instructor. *Three credit hours*. MS. GILKES

**357** Race Relations and Social Change A seminar examining the impact of the civil rights and black power movements on sociological concepts, theories, and perspectives on race relations, racial stratification, social change, and ethnicity. The PBS series "Eyes on the Prize I and II" utilized to introduce readings and discussions of sociological and ideological texts influenced or produced by activists and activities of the civil rights or black power movements. The connections among civil rights and black power movements and other social movements in the United States and other societies. Enrollment limited. *Prerequisite:* An introductory anthropology, sociology, history, or American studies course, or permission of the instructor. *Four credit hours*. MS. GILKES

**381, 382** Independent Integrating Project Under faculty supervision, each student will complete an independent research project which is informed by the student's sociological perspective and reflects knowledge of both theoretical concepts and empirical research methods. Majors must begin planning and secure a faculty adviser for the project before the start of their final semester. Formerly listed as Sociology 371, 372. *Prerequisite:* Sociology 131, 215, 271, and permission of the instructor. *Two to four credit hours*. MR. MORRIONE AND FACULTY

[391] Gender and Public Policy How images of gender, gender difference, and the social positions of women and men affect public policies concerning divorce, provisions for child care for families with working parents, poverty, and discrimination in employment. Enrollment limited. *Prerequisite:* Sociology 131 and permission of the instructor. *Three or four credit hours*.

[392] Freud Focus on Freud and his sociological interpreters: a review of Freud's most important works and a survey of contemporary interpretations of psychoanalysis. Critical theory, Parsonian functionalism, and the feminist reconstructions of Nancy Chodorow and Jessica Benjamin. Enrollment limited. *Prerequisite:* Sociology 131 or permission of the instructor. Four credit hours.

[394] Social Movements An effort to shed light on forms of collective action by analyzing relevant theories and selected cases of important historical and contemporary movements. Public opinion, propaganda, and other cultural mechanisms for generating solidarity and dissent. Enrollment limited. *Prerequisite:* Sociology 131. *Four credit hours*. FACULTY

491, 492 Independent Study Individual topics in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Senior standing and permission of the department. *Two to four credit hours*. FACULTY

493 Senior Sociology Seminar The meaning and development of sociological perspectives. Individual projects developed from group discussions. *Prerequisite*: Permission of the instructor. *Three credit hours*. MR. MORRIONE

### Spanish

In the Department of Romance Languages and Literatures. Unless otherwise specified, all courses numbered above 127 are conducted in Spanish. Spanish 135 or 136 or permission of the instructor is required for all courses numbered 200 or higher.

Professor Francisco Cauz<sup>1</sup>; Associate Professors Priscilla Doel and Jorge Olivares; Assistant Professors Javier Gonzalez-Alonso, Silvia Bermudez, and Betty Sasaki; Instructor Barbara Nelson<sup>2</sup>; Visiting Instructor Alan Davison<sup>3</sup>

Achievement Test: If a student offers a foreign language for entrance credit and wishes to continue it in college, that student must either have taken the College Board achievement test in the language or take the placement test during orientation.

Requirements for the Major in Spanish Spanish 231 and at least seven additional semester Spanish courses numbered above 128; one course at the 200 level or above in each of the following areas: Golden Age, Modern Peninsular literature, and Spanish American literature.

The following statements also apply:

(1) The pointscale for retention of the major is based on all Spanish courses numbered above 128.

(2) No major requirements may be taken satisfactory/unsatisfactory.

(3) No more than the equivalent of four semester courses of foreign study or transfer credit may be counted toward the major.

(4) All majors must take at least one course in Spanish approved by the major adviser each semester until graduation.

(5) No more than one Hispanic literature/culture course offered in English may be counted toward the major.

<sup>1</sup>Resident director, Colby in Salamanca, full year.

<sup>2</sup>Part-time.

<sup>3</sup>Resident director, Colby in Cuernavaca, first semester.

115 Mexican History A survey covering the period from the pre-Columbian civilizations through the modern era. Course conducted in Spanish. Nongraded. Offered in Cuernavaca. *Two credit hours*. FACULTY

**116 Mexican Society** An introduction to contemporary Mexican society with special emphasis on the role of the Indian and the mestizo. Course conducted in Spanish. Nongraded. Offered in Cuernavaca. *Two credit hours*. FACULTY

[117j] Intensive Spanish A course in oral and written Spanish given at the Center for Bilingual Multicultural Studies in Cuernavaca, Mexico, intended for students at the 100 level in Spanish. Nongraded. *Prerequisite:* Permission of the instructor. *Three credit hours*.

125, 126, 127 Intensive Spanish in Mexico An intensive Spanish language course given in Cuernavaca, Mexico. *Twelve credit hours*. INSTRUCTOR

**125, 126d Elementary Spanish** Introduction to the language by an audio-lingual method, with emphasis on understanding, speaking, and reading. Use of taped materials in the language laboratory is a regular part of the class work. Spanish 125 is prerequisite for 126. *Four credit hours*. FACULTY

**127d** Intermediate Spanish I Continued practice in the oral-aural skills, with increasing emphasis on reading and writing. *Prerequisite:* Spanish 126 or appropriate score on the College Board Spanish achievement test. *Four credit hours*. FACULTY

**128d Intermediate Spanish II** The development of reading skills through Spanish and Spanish-American texts. Enrollment limited. *Prerequisite:* Spanish 127. *Three credit hours*. MS. BERMUDEZ

131d Conversation and Composition Language review with emphasis on oral expression, written composition, and vocabulary development. Enrollment limited. *Prerequisite:* Spanish 128 or permission of the instructor. *Three credit hours*. MS. SASAKI

135 Introduction to Hispanic Literature I Introduction to literary analysis through Spanish texts. *Prerequisite:* Spanish 131 or permission of the instructor. *Three credit hours*. MS. SASAKI

**136** Introduction to Hispanic Literature II Introduction to literary analysis through Spanish-American texts. *Prerequisite:* Spanish 131 or permission of the instructor. *Three credit hours*. MR. GONZALEZ-ALONSO

**216j** Voiceless Voices: The "Other" in Hispanic America Todevelop a critical awareness of the marginal voices that have been silenced by the "master" discourses in the last two centuries in the Hispanic world, focusing on the complex issues raised by the relationship between the power of writing and the voicing of the experiences of racially, socially, and politically marginalized people. Readings include literary and non-literary texts by Hispanic American and United States Hispanic authors. Non-Spanish majors may write papers and examinations in English. The course does not count toward one of the three required areas for the Spanish major. *Three credit hours*. MS. BERMUDEZ

**231d** Advanced Spanish A review of Spanish grammar at the advanced level, with directed themes and free composition, and structured oral work on idiomatic usage. Enrollment limited. *Prerequisite:* Spanish 131. *Four credit hours*. MR. OLIVARES

[232] Spanish American Culture A consideration of the ways representative Spanish American thinkers define *lo americano*. Topics for discussion will include cultural stereotypes, colonialism, anglophobia, miscegenation, and revolution. Readings from different genres (poetry, novel, essay, theater) and authors, such as Arriví, Carpentier, N. Guillén, Martí, Neruda, Paz, Rodó, and Vasconcelos. *Four credit hours*.

255 Nineteenth-Century Spanish Literature Representative works of romanticism and realism. Four credit hours. MR. GONZALEZ-ALONSO

[256] The Generation of 1898 The principal figures of this generation: Unamuno, Azorín, Baroja, Valle-Inclán, and Machado. *Four credit hours*.

[257] Modern Spanish Literature The literature of twentieth-century Spain. Four credit hours.

261 Spanish American Literature I Spanish American literature from the Colonial period to 1888: Discovery, Colonization, and Independence. *Four credit hours*. MS. DOEL

262 Spanish American Literature II Spanish American literature from 1888 to the present. Four credit hours. MR. OLIVARES

[332] Contemporary Spanish-American Fiction Close readings of contemporary Spanish-American narrative texts by representative authors such as Borges, Cabrera Infante, Carpentier, Cortázar, Fuentes, Garcia Márquez, Puig, Valenzuela, and Vargas Llosa. Topics for discussion include texts and contexts, narrative perspective, the role of the reader, and the carnivalesque. *Four credit hours*.

[334] Women in Hispanic Poetry and Fiction Works by both male and female Hispanic authors are included in this study of the portrayal of women in Hispanic poetry and fiction. Selections from the Middle Ages through modern times will reflect both traditional and non-traditional portrayals of women in what has been a particularly macho-oriented culture. Four credit hours.

[337] Medieval Spanish Literature Medieval Spanish classics (ElCid, Ellibro de buen amor, La Celestina, and Elromancero) and classic types (lords and vassals, prostitutes and pimps, sages and pages, liberated women and misogynist men, illicit lovers and idealistic dreamers). Four credit hours.

**351d2** El Siglo de Oro Prose, poetry, and theater of Spain in the sixteenth and seventeenth centuries, including authors such as Cervantes, Lope de Vega, Calderón, Tirso de Molina, Ruiz de Alarcón, Garcilaso, Fray Luis de León, and Quevedo. *Four credit hours*. MS. SASAKI

[352] Don Quijote In depth reading and analysis of Don Quijote de la Mancha. Four credit hours.

[358] The Contemporary Spanish Novel The Spanish novel after the Spanish Civil War (1936–39). Authors will include Carmen Laforet, Camilo José Cela, Ignacio Aldecoa, Jesús Fernández Santos, Juan Marsé, Luis Martín Santos, and Juan Goytisolo. Four credit hours.

491, 492 Independent Study Individual projects in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite*: Permission of the instructor. *Two to four credit hours*. FACULTY 493 Seminar in Spanish and Spanish American Literature—Spain in the '70s and '80s: Poetry, Narrative, Film A consideration of how the textual production of the '70s marked the transition from a neo-realist to a self-reflexive mode in an attempt to question reality through the "fantastic"; and how the poetry of this decade questions the supremacy of reason over sensorial experience. The production of the '80s will lead to understanding of the notion of "historicity" in those narrative texts which focus on a nostalgia for the past, and an understanding of the dissatisfaction with two Spanish institutions—the family and religion as expressed by the poetry of the voces femeninas. Four credit hours. MS. BERMUDEZ

## Women's Studies

Director, ASSOCIATE PROFESSOR DEBRA CAMPBELL

The Women's Studies Program is devoted to analyzing the social, psychological, political, economic, historical, and artistic dimensions of women's experience, drawing on courses from a broad range of disciplines to reflect the complexities of women's lives. It encourages the development of new methods of analysis and the introduction of previously neglected fields of study with the goal of enriching the entire college curriculum.

Students may pursue a minor in women's studies or structure a major under the auspices of the independent major board with the guidance of the director of women's studies.

Requirements for the Minor in Women's Studies A minimum of 24 credit hours in at least two departments, to include Women's Studies 111 (or its equivalent), 493; Government 312; and at least two additional courses at the 300 or 400 level. No more than three credit hours of field experience may be taken toward the minor.

Courses Offered in Women's Studies

American Studies: 374 The Female Experience in America.

Anthropology: 254 Women of Color in the United States.

Biology: 115j Biology of Women.

East Asian Cultures and Languages: 271 Japanese Women Through Films and Literature.

Economics: 254 Women in the Labor Market.

Education: 332 Women, Girls, and the Culture of Education.

English: 331 Playing the Woman in Renaissance Drama; 343 African-American Literature; 425 Modern Women's Literature; 493 Seminar in British or American Literature (as appropriate). French: 331 Images of Women in French Literature; 352 French Canadian Literature; 353 Francophone Women Authors; 398 Women in African Literature of French Expression; 493 Seminar: Representation of Gender in the French Tradition.

German: 333 German Women Writers.

Government: 312 Directions in Feminist Theory; 319 Law and Social Change: Women and Minorities; 414 Contemporary Social Theory; 434 Women in American Politics.

History: 211 Public Lives/Private Lives: Men and Women in Europe from the Middle Ages to the Present; 236 History of Women in Europe; 257 History of Women in America; 344 Images in Black and White: Southern Women from the Civil War to Civil Rights; 419 Women, Law, and Medicine in Early Modern Europe: The Witch-craze.

Philosophy: 155j Feminist Philosophies.

*Religious Studies:* 255 Seminar: The Goddess: A Hermeneutics in Thealogy; 257 Women in American Religion; 316 Contemporary Western Theology; 391 Seminar: Third World Liberation Theologies 1960-1990.

Sociology: 151j Beyond the Canon: Sociology in Women's Writing; 219 The Bible and Social Inequality; 273 The Family; 276 Women and Men in Society; 355 African-American Women and Social Change; 391 Gender and Public Policy.

Spanish: 334 Women in Hispanic Poetry and Fiction.

Women's Studies: 111j Introduction to Women's Studies; 493 Seminar in Women's Studies.

111j Introduction to Women's Studies Through lectures and discussion of readings, the course will examine the contributions of feminist scholarship to the understanding of selected topics in the humanities, social sciences, and natural sciences. Social programs dealing with women's issues, and oral histories of women's lives. Enrollment limited. Three credit hours. MS. BLAKE

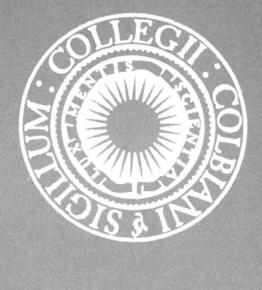
198j Sexuality: Myth and Reality What shapes our sexual behavior? How are our sexual identities formed? What roles do biology and culture play in these processes? An interdisciplinary exploration of the connections between our individual sexuality issues and our social, cultural, and familial contexts. Topics include the physiology of sex, sexual dysfunction, and reproduction; sexual imagery, pornography and erotica; gender issues and sexual preferences/ identities; AIDS, STDS, and safe sex; and sexual violence from incest to date rape. *Three credit hours*. MS. FRANZEN

**491,492** Independent Study Individual study of special problems in women's studies in areas where the student has demonstrated the interest and competence necessary for independent work. *Prerequisite:* Permission of the instructor and program director. *One to four credit hours*. FACULTY

**493d2 Women's Studies Senior Seminar** The seminar moves from department to department, and the topic changes each year, structured to provide an opportunity for senior minors to share a common experience of intensive, advanced work in women's studies, and for group discussions of the most substantial recent works in the field. Spring 1992: The Meaning of Difference. An examination of recent feminist scholarship challenging women's studies to incorporate notions of difference within an analysis of the position of women in society; the implications of class, race, and colonialism for understanding what it means to be "woman." *Four credit hours.* MS. ROSE

# 3 Directories and Appendices

- The Corporation 185
  - Faculty 193
  - Administration 213
- Enrollment by States and Countries 216
- Degrees Awarded at Commencement 217
  - Honors 223
    - Index 231
  - College Calendar 1991-92 236
  - College Calendar 1992-93 237



# The Corporation 1991-92

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<sup>2</sup>Died November 11, 1990. <sup>3</sup>Died December 28, 1990.

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ROBERT EDWARD DIAMOND, JR. '74, M.B.A., London, England, Managing Director, International Trading, Morgan Stanley & Co. (1994)

ROGER FREDERIC DUMAS '60, M.B.A., Boston, Massachusetts, Investment Consultant, R. F. Dumas & Co., Visiting Committee on Mathematics (1994)

JOHN WARNER FIELD, B.A., M.A. '60, Rye, New York, Management and Finance Consultant, Mine Hill Consultants Office, Visiting Committees on Economics, on Administrative Science, and on Publications, Public Affairs, and College Editor (1993)

JOHN WARNER FIELD, JR. '66, London, England, Senior Vice President, J. P. Morgan & Company, Incorporated, Visiting Committee on Computer Services (1993)

PETER GEOFFREY GORDON '64, M.B.A., Mill Valley, California, Co-Founder and Chairman, Crystal Geyser Water Company (1995)

CURTIS C. HARRIS, M.D., Bethesda, Maryland, Chief, Laboratory of Human Carcinogenesis, National Cancer Institute, Visiting Committee on East Asian Studies (1995)

KENNETH N. HART '51, LL.B., Round Ridge, New York, Senior Partner, Donovan, Leisure, Newton & Irvine (1995)

GEORGE EDWARD HASKELL, JR. '55, M.A., Boston, Massachusetts, President, Haskell & Company, Visiting Committee on Economics (1994)

ELLEN BROOKS HAWEELI '69, Greenwich, Connecticut, President, EBH Associates, Inc., Visiting Committees on Women's Studies and on Development and Alumni Relations (1992)

JANET GAY HAWKINS '48, Plandome, New York, Visiting Committees on the Library and on Health Services (1993)

SUSAN SMITH HUEBSCH '54, South Dartmouth, Massachusetts, Real Estate Broker, Visiting Committees on Career Services and on Physical Plant (1993)

H. ALAN HUME, M.D., Oakland, Maine, Medical Director, Garrison-Foster Health Center, Visiting Committees on Chemistry, on Biology, on Health Services, and on Women's Studies (1993)

SOL HURWITZ, B.A., Rye, New York, President, Committee for Economic Development, Visiting Committees on Psychology, on Publications, Public Affairs, and College Editor, on English, and on Music (1993)

EDITH KEMPER JETTÉ, M.A. '62, Boston, Massachusetts, Co-Founder, The Friends of Art at Colby, Visiting Committee on Art (1993)

ANTHONY FERDINAND KRAMER '62, M.C.P., Burr Ridge, Illinois, Senior Vice President and Treasurer, Draper and Kramer, Incorporated, Visiting Committees on Performing Arts and on Russian and Soviet Studies (1993)

ALLAN JORDAN LANDAU '55, LL.M., Boston, Massachusetts, Attorney, Widett, Slater & Goldman, P.C., Visiting Committees on Physical Education and Athletics and on Development and Alumni Relations (1992)

F. ROCCO LANDESMAN '69, D.F.A., Brooklyn, New York, President, Jujancyn Theatres (1995)

CHARLES CUTLER LEIGHTON '60, M.D., Ambler, Pennsylvania, Senior Vice President, Merck, Sharp & Dohme Research Laboratories (1994)

ROBERT ALF LINDGREN, J.D., New York, New York, Partner, Rogers and Wells, Visiting Committees on Music and the Performing Arts, on Art and the Museum of Art, and on Dining Services (1995)

PETER HAROLD LUNDER '56, Waterville, Maine, President, Assistant Treasurer, and Director, Dexter Shoe Company, Visiting Committees on Physical Plant, on Art and the Museum of Art, and on Physical Education and Athletics (1994)

WILLIAM THOMAS MASON, Jr. '47, LL.B., Norfolk, Virginia, Attorney, Robinson, Zaleski & Lindsey, Visiting Committees on African-American Studies and on Women's Studies (1995)

DEBORAH NUTTER MINER '68, Ph.D., Westwood, Massachusetts, Director of International Relations and Professor of Political Science, Simmons College, Visiting Committee on Government (1992)

JEAN PRATT MOODY '56, M.Ed., Cape Elizabeth, Maine (1995)

C. RICHARD PETERSON '60, Bryn Mawr, Pennsylvania, Executive Vice President, Sedgwick James & Co., Inc., Visiting Committees on Career Services, on History, on Physical Plant, and on Public Affairs, Publications, and College Editor (1995)

PAUL JACQUES SCHUPF, B.A., Hamilton, New York, Steinhardt Partners, Visiting Committees on Art and the Museum of Art and on Computer Services (1993)

PETER C. SCHWARTZ, LL.B., Glastonbury, Connecticut, Partner, Gordon, Muir and Foley, Visiting Committees on Student Affairs and on Development and Alumni Relations (1992)

GEORGE IRVING SMITH '49, Ph.D., Portola Valley, California, Geologist, U.S. Geological Survey, Visiting Committee on Chemistry (1993)

GREGORY WHITE SMITH '73, J.D., Aiken, South Carolina, President, Woodward/White, Inc., Visiting Committees on American Studies, on Anthropology and Sociology, and on the Library (1992)

HENRY JOSEPH SOCKBESON '73, J.D., Laurel, Maryland, Directing Attorney, Native American Rights Fund, Visiting Committee on Music (1993)

ELAINE ZERVAS STAMAS '53, Scarsdale, New York, Visiting Committees on Music and the Performing Arts, on Health Services, and on Modern Foreign Languages (1995)

LAEL SWINNEY STEGALL '62, M.S., Washington, D.C., Director of Finance and Planning, Communications Consortium, Visiting Committees on Russian and Soviet Studies and on Women's Studies (1992)

M. ANNE O'HANIAN SZOSTAK '72, M.A. '74, Warwick, Rhode Island, Corporate Vice President, Fleet/Norstar Financial Group, Incorporated, Visiting Committees on African-American Studies, on Women's Studies, and on Career Services (1993)

JUDITH PROPHETT TIMKEN '57, Lafayette, California, Art Docent, Oakland Museum, Trustee, California College of Arts and Crafts, Visiting Committees on Music and the Performing Arts and on Art and the Museum of Art (1992)

ALLAN VAN GESTEL '57, LL.B., Boston, Massachusetts, Partner, Goodwin, Procter & Hoar (1995)

DIANE GERTH VAN WYCK '66, J.D., Brooklyn, New York, Senior Vice President, Taxes, American Express Travel Related Services, Visiting Committees on Classics and on East Asian Studies (1993)

THOMAS JOHN WATSON III '67, M.A. '75, J.D., Wilton, Connecticut, Attorney-at-Law (1995)

ANDREW JAY WEILAND '64, M.D., New York, New York, Medical Director and Surgeon-in-Chief, Hospital for Special Surgery (1994)

JOHN R. ZACAMY, JR. '71, M.B.A., Rye, New York, Former Managing Director, Morgan Stanley & Co., Incorporated, Visiting Committee on Career Services (1995)

## **Overseers Visiting Committees 1990-91**

Russian and Soviet Studies September 30–October 2, 1990 / Ms. Lael Stegall, chair; Mr. Eugene Huskey, Department of Political Science, John B. Stetson University, consultant; Mr. Anthony F. Kramer; Professor Barry Scherr, Department of Russian, Dartmouth College, consultant.

**Chemistry** October 28–30, 1990 / Dr. George I. Smith, chair; Dr. H. Alan Hume; Professor Margaret Merritt, Department of Chemistry, Wellesley College, consultant; Professor Stuart Rosenfeld, Department of Chemistry, Smith College, consultant.

Administrative Science November 1–3, 1990 / Mr. E. Michael Caulfield, chair; Ms. Mary M. Colonna; Professor Walter Hecox, Department of Business and Economics, Colorado College, consultant; Ms. Beverly Nalbandian Madden.

Sociology and Anthropology November 15–17, 1990 / Mr. Gregory Smith, chair;

#### 192 THE CORPORATION

Reverend Reginald Blaxton; Professor David Napier, Department of Anthropology, Middlebury College, consultant; Professor Mark Gould, Department of Sociology, Haverford College, consultant.

Economics February 21–23, 1991 / Mr. Edson V. Mitchell III, chair; Mr. Robert E. Diamond, Jr.; Mr. George E. Haskell; Professor Len Nichols, Department of Economics, Wellesley College, consultant.

Classics March 17–19, 1991 / Professor Judith de Luce, chair; Professor Arthur Robson, Department of Classics, Beloit College, consultant; Professor Carol G. Thomas, Department of History, University of Washington, consultant; Ms. Diane Van Wyck.

Career Services April 23–25, 1991 / Mr. C. Richard Peterson, chair; Ms. Susan Huebsch; Mr. Eugene Roach, Director of the Career Center, Hamilton College, consultant; Mr. John Zacamy, Jr.

## Faculty 1990-92

WILLIAM R. COTTER, M.A. '79, L.H.D., J.D. (Harvard), 1979-Professor of Government; President

ROBERT PAUL MCARTHUR, M.A. '83, Ph.D. (Villanova, Temple), 1972-Professor of Philosophy; Vice President for Academic Affairs and Dean of Faculty, 1988-

#### Emeriti

ROBERT EDWARD LEE STRIDER II, M.A. '57, Ph.D., Litt.D. '79, 1957-79 Professor of English, Emeritus; President, Emeritus

DENNISON BANCROFT, M.A. '59, Ph.D., 1959-74 Professor of Physics, Emeritus

ROBERT MARK BENBOW, M.A. '62, Ph.D., 1950-90 Roberts Professor of English Literature, Emeritus

CLIFFORD JOSEPH BERSCHNEIDER, M.A. '78, M.A., 1949-85 Professor of History, Emeritus

ARCHILLE HENRI BIRON, M.A. '74, A.M., 1950-77 Professor of Modern Languages, Emeritus

MARJORIE DUFFY BITHER, M.A. '76, M.A., 1935-41, 1957-79 Professor of Physical Education, Emerita

PHILIP STEWART BITHER '30, M.A. '73, M.A., 1932-74 Professor of Modern Languages, Emeritus

DAVID GORDON BRIDGMAN, Ph.D., 1955-78 Associate Professor of History, Emeritus

JEAN D. BUNDY, M.A. '63, Ph.D., 1963-89 Dana Professor of French Literature, Emeritus

JAMES MORTON CARPENTER, M.A. '54, Ph.D., 1950-81 Jetté Professor of Art, Emeritus

WILFRED JAMES COMBELLACK '37, M.A. '48, Ph.D., 1948-80 Professor of Mathematics, Emeritus

ALICE PATTEE COMPARETTI, M.A. '61, Ph.D., 1936-73 Professor of English, Emerita

ERMANNO FRANCIS COMPARETTI, M.A. '53, Ph.D., 1941-74 Professor of Music, Emeritus

FLORENCE ELIZABETH LIBBEY CRAWFORD '29, M.S., 1948-71 Associate Professor of Library Science, Emerita

RICHARD NYE DYER, B.A., 1950-83 Assistant to the President, Emeritus

JACK DONALD FONER, M.A. '73, Ph.D., L.H.D. '82, February 1969-74; Visiting Scholar in Residence, September-December 1983, September-December 1985 Professor of History, Emeritus

FREDERICK ARTHUR GEIB, M.A. '75, Ph.D., 1955-91 Professor of Sociology, Emeritus

JAMES MACKINNON GILLESPIE<sup>1</sup>, M.A. '69, Ph.D., 1951-84 Professor of Psychology, Emeritus; Associate Dean of Students, Emeritus

ADEL VERNA HEINRICH, A.Mus.D., 1964-88 Associate Professor of Music, Emerita; Director of Chapel Music, Emerita

HENRY HOLLAND, M.A. '66, Ph.D., 1952-88 Professor of Modern Languages (Spanish), Emeritus; Resident Director of Colby in Cuernavaca Program, Emeritus

EARL AUSTIN JUNGHANS<sup>2</sup>, M.S., 1960-72 Associate Professor of Mathematics, Emeritus

DONALDSON KOONS, M.A. '51, Ph.D., 1947-82, January 1984, 1985, 1986, 1987, 1988 Dana Professor of Geology, Emeritus

PAUL EWERS MACHEMER, M.A. '67, Ph.D., 1955-83 Merrill Professor of Chemistry, Emeritus

COLIN EDWARD MACKAY, M.A. '73, Ph.D., 1956-December 1990 Professor of English, Emeritus

GEORGE DOUGLAS MAIER, M.A. '83, Ph.D., 1965-86 Professor of Chemistry, Emeritus

E. JANET MARCHANT, M.A., 1940-65 Associate Professor of Physical Education, Emerita

LEONARD WITHINGTON MAYO '22, M.A. '57, D.S.S. '42, 1966-71 Professor of Human Development, Emeritus

EARLE ALTON MCKEEN '29, M.Ed., 1955-71 Associate Professor of Education, Emeritus

WILLIAM BLACKALL MILLER, M.A. '74, Ph.D., 1956-82, February-June 1984 Professor of Art, Emeritus

STANLEY A. NICHOLSON, M.A. '81, Ph.D., 1981-90 Professor of Economics, Emeritus; Administrative Vice President, Emeritus

GEORGE THOMAS NICKERSON '29, M.A., 1948-67 Dean of Men, Emeritus

LUELLA FREDERICKA NORWOOD, M.A. '52, Ph.D., February 1943-53 Professor of English, Emerita

CLIFFORD HAZELDINE OSBORNE, B.A., D.D. '49, 1949-65 Professor of Religion, Emeritus; Chaplain, Emeritus

FRANCIS HOWARD PARKER, M.A. '71, Ph.D., 1971-86 Dana Professor of Philosophy, Emeritus

PAUL POWERS PEREZ, M.A. '73, Ph.D., February 1960-85 Professor of Psychology, Emeritus

ROBERT WHITE PULLEN '41, M.A. '59, Ph.D., 1945-81 Professor of Economics, Emeritus; Administrative Vice President, Emeritus WENDELL AUGUSTUS RAY, M.A. '54, Ph.D., 1938-76 Professor of Chemistry, Emeritus

PETER JOSEPH RE, M.A. '65, M.A., 1951-84 Professor of Music, Emeritus

EVANS BURTON REID, M.A. '58, Ph.D., 1954-78 Merrill Professor of Chemistry, Emeritus

ROBERT EVERETT REUMAN, M.A. '69, Ph.D., 1956-91 Dana Professor of Philosophy, Emeritus

ALLAN CHARLES SCOTT, M.A. '51, Ph.D., 1951-73, January 1984 Dana Professor of Biology, Emeritus

GORDON WINSLOW SMITH, M.A. '71, M.A., 1930-72 Professor of Modern Languages, Emeritus

NORMAN SWASEY SMITH, M.Ed., 1945-68 Associate Professor of Education, Emeritus

IRVING DAVID SUSS, M.A. '73, Ph.D., 1957-80 Professor of English, Emeritus

JOHN HALE SUTHERLAND, M.A. '70, Ph.D., 1951-86 Professor of English, Emeritus

EDWARD HILL TURNER, A.B., M.A. '82, L.H.D. '73, 1953-78 Vice President for Development, Emeritus

GUENTER WEISSBERG, M.A. '70, J.D., Ph.D., 1965-1988 Professor of Government, Emeritus

RALPH SAMUEL WILLIAMS '35, M.A. '73, M.B.A., L.H.D. '72, 1947-73 Wadsworth Professor of Administrative Science, Emeritus; Administrative Vice President, Emeritus

WALTER HENRY ZUKOWSKI, M.A. '65, Ph.D., 1952-82 Wadsworth Professor of Administrative Science, Emeritus

<sup>1</sup>Died June 9, 1991. <sup>2</sup>Died July 17, 1986.

## Faculty

The faculty is arranged alphabetically. In parentheses are listed colleges and universities from which earned degrees have been received.

PAULA ANN ABOUD, B.A.<sup>7</sup> (Arizona), 1986-Adjunct Instructor in Physical Education

JULIA ADAMS, D.Mus. '86, M.A. (Oberlin, San Francisco State), 1986-Artist in Residence in Music

DEBRA ANN AITKEN, M.Ed. (Frostburg State [Maryland], Plymouth State), 1985-Adjunct Associate Professor of Physical Education

ROBERT VINCENT ALBIS, M.A. (Yale), 1990-91 Taylor Lecturer in Classics

MARK CANNON ALDRICH, Ph.D. (Hamilton, Massachusetts at Amherst), 1989-91 Visiting Instructor in Spanish

DONALD BRUCE ALLEN, M.A. '82, Ph.D. (Fresno State, Illinois), 1967-Professor of Geology

ROCHELLE AMAREL, M.S. (Ithaca, St. Bonaventure), 1989-91 Adjunct Instructor in Physical Education

ANTHONY ALFRED ANEMONE, JR., Ph.D. (Columbia, California at Berkeley), 1985-Assistant Professor of Russian

DOUGLAS NELSON ARCHIBALD, M.A. '73, Ph.D. (Dartmouth, Michigan), 1973-Roberts Professor of Literature; Vice President for Academic Affairs and Dean of Faculty, 1984-88; Editor of Colby Quarterly, 1986-

SAMUEL LEIGH ATMORE, M.S.<sup>3</sup> (Pennsylvania State, Simmons), 1977-Faculty Member without Rank: Audiovisual Librarian

TOM C. AUSTIN, B.S. (Maine), 1986-Adjunct Associate Professor of Physical Education

CAROL HOFFER BASSETT, M.A.<sup>7</sup> (South Dakota), 1974-Assistant Professor of Mathematics

CHARLES WALKER BASSETT, M.A. '80, Ph.D. (South Dakota, Kansas), 1969-Dana Professor of American Studies and of English

MIRIAM FRANCES BENNETT, M.A. '73, Ph.D.<sup>2,5</sup> (Carleton, Mount Holyoke, Northwestern), 1973-

William R. Kenan, Jr., Professor of Biology

WILLIAM BERLINGHOFF, Ph.D. (Holy Cross, Boston College, Wesleyan), 1988-91 Professor of Mathematics

SILVIA BERMUDEZ, M.A. (Universidad Central de Barcelona, Southern California), 1989-Assistant Professor of Spanish

PARKER JOY BEVERAGE, M.A. (Dartmouth, Stanford), 1985-Faculty Member without Rank: Dean of Admissions and Financial Aid

PAMELA ANN BLAKE, Ph.D. (St. Lawrence, Cornell), 1985-Assistant Professor of Government and of Women's Studies

ROBERT T. BLUHM, JR., Ph.D. (New York University, Princeton, Columbia, Rockefeller), 1990-

Visiting Assistant Professor of Physics

DAVID BRUCE BOURGAIZE, Ph.D. (Ohio Northern, Massachusetts at Amherst), 1988-Assistant Professor of Chemistry

CHRISTINE BOWDITCH, Ph.D. (Bates, Pennsylvania), 1991-Assistant Professor of Sociology

ROGER WILSON BOWEN, M.A. '87, Ph.D.<sup>4</sup> (Wabash, Michigan, British Columbia), 1978-Professor of Government and of East Asian Culture and Languages

AMY HANCOCK BOYD, Ph.D. (Michigan, Stanford, Michigan), 1991-Visiting Assistant Professor of Mathematics

JAMES BOYLAN, M.A. (Wesleyan, Johns Hopkins), 1988-Assistant Professor of English PATRICK BRANCACCIO, M.A. '79, Ph.D.<sup>6</sup> (Brooklyn, Ohio State, Rutgers), 1963-Professor of English and of Performing Arts

FRANCIS THOMAS BRIGHT, M.A. (Notre Dame, Cornell), 1990-Visiting Instructor in French

MORTON AARON BRODY, J.D.<sup>7</sup> (Bates, Chicago), 1984-Professor of Government

LYN MIKEL BROWN, Ed.D. (Ottawa [Canada], Harvard), 1991-Assistant Professor of Education

CEDRIC BRYANT, Ph.D.<sup>6</sup> (California at San Diego), 1988-Assistant Professor of English

MICHAEL DAVID BURKE, M.F.A.<sup>7</sup> (California at Berkeley, Massachusetts at Amherst), 1987-91

Visiting Assistant Professor of English

SHEILA MARIE CAIN, M.S. (College of St. Catherine, Iowa State), 1991-Adjunct Assistant Professor of Physical Education and Athletics

CHERYL HAUSE CALHOUN, Ph.D. (Northwestern, Texas at Austin), 1991-Associate Professor of Philosophy

DEBRA CAMPBELL, Ph.D. (Mt. Holyoke, St. Michael's [Toronto], Boston University), January-June 1983; 1986-Associate Professor of Religion

MURRAY FRANCIS CAMPBELL, Ph.D. (Pennsylvania State, Cornell), 1980-Associate Professor of Physics

THOMAS EDWARD CARSON, Ph.D. (Georgetown, Michigan), 1991-Visiting Assistant Professor of History

FRANCISCO ANTONIO CAUZ, M.A. '77, Ph.D. (Villanova, Middlebury, Rutgers), 1957-Professor of Spanish; Resident Director of Colby in Salamanca Program, 1990-

ARTHUR KINGSLEY CHAMPLIN, M.A. '87, Ph.D. (Williams, Rochester), 1971-Professor of Biology; Resident Director of Colby in Cork Program, 1991-92

RONALD GEORGE ANDREW CLUETT, B.A. (Trinity, Toronto), 1991-Taylor Lecturer in Classics

DANIEL HARRY COHEN '75, Ph.D.<sup>6</sup> (Colby, Indiana), 1983-Associate Professor of Philosophy

FREDERICK RUSSELL COLE, M.A. '90, Ph.D. (Massachusetts, Illinois), 1977-Professor of Biology

SUSAN WESTERBERG COLE, M.S. (Knox, Illinois), 1978-Faculty Member without Rank: Science Librarian

GEORGE LEIDIGH COLEMAN II, M.A. (Cornell, Kansas), 1963-Associate Professor of Geology; Registrar

CHARLES W. S. CONOVER III, Ph.D. (Middlebury, Virginia), 1990-Assistant Professor of Physics

CHARLES NELSON COREY III, M.Ed. (Bowdoin, Maine), 1989-Adjunct Assistant Professor of Physical Education

- ANTHONY J. CORRADO, JR., Ph.D.<sup>6</sup> (Catholic University, Boston College), February 1986-Assistant Professor of Government
- WILLIAM R. COTTER, M.A. '79, L.H.D., J.D. (Harvard), 1979-Professor of Government; President
- ANTHONY PATRICK CUNNINGHAM '80, Ph.D.<sup>7</sup> (Colby, Pennsylvania), 1989-91 Visiting Assistant Professor of Philosophy
- EILEEN MARY CURRAN, M.A. '73, Ph.D.<sup>2</sup> (Cornell, Cambridge, Cornell), 1958-Professor of English
- DAVID HARI DAS, M.A. (Bowdoin, Washington), 1990-Visiting Assistant Professor of History
- ALAN ROBERT DAVISON, M.A. (Universidad Interamericana [Puerto Rico], Utah), 1991-Visiting Instructor in Spanish; Resident Director of Colby in Cuernavaca Program
- GENE BARTHOLOMEW DELORENZO '75, B.A. (Colby), 1977-91 Adjunct Assistant Professor of Physical Education
- GUILAIN PIERRE DENOEUX, Ph.D. (Grenoble [France], Georgetown, Princeton), 1990-Assistant Professor of Government
- KEITH J. DEVLIN, M.A. '89, Ph.D. (King's College [London], University of Bristol [England]), 1989-
- Carter Professor of Mathematics
- THOMAS A. DEXTER, M.S. (S.U.N.Y. at Cortland), 1989-Adjunct Instructor in Physical Education
- SUELLEN DIACONOFF, Ph.D. (Willamette, Indiana), 1986-Associate Professor of French; Resident Director of Colby in Caen Program, 1991-92
- ROBERTO IGNACIO DIAZ, A.M. (Georgetown), 1990-91 Visiting Instructor in Spanish
- PRISCILLA ALLEN DOEL, M.A. (Colby Junior, New York University), 1965-Associate Professor of Portuguese and Spanish
- WILLIAM EUGENE DOLL, Ph.D. (Montana State, Wisconsin at Madison), 1983-91 Assistant Professor of Geology
- MICHAEL REYNOLDS DONIHUE '79, Ph.D.<sup>6</sup> (Colby, Michigan), 1989-Assistant Professor of Economics
- PAUL KENNETH DOSS, M.S. (Indiana, Northern Illinois), 1991-Instructor in Geology
- JOHN MINOT DUDLEY, M.A. '86, Ph.D.<sup>2, 5</sup> (Massachusetts Institute of Technology, California at Berkeley), 1964-Professor of Physics
- CHARLES DUFOUR, Ph.D. (Hofstra, New Hampshire), 1990-91 Visiting Assistant Professor of Psychology
- MARGARET A. EASTMAN, Ph.D. (California at Santa Barbara, North Carolina at Chapel Hill), 1991-Visiting Assistant Professor of Chemistry
- SUZANNE FALGOUT, Ph.D.<sup>1, 2</sup> (New Orleans, Oregon), 1987-Dana Faculty Fellow and Assistant Professor of Anthropology

SIDNEY WEYMOUTH FARR '55, M.A., M.B.A. (Colby, Maine), 1960-Associate Professor; Alumni Secretary; Secretary of the Corporation

LEE NATHAN FEIGON, M.A. '90, Ph.D. (California at Berkeley, Chicago, Wisconsin), 1976-Professor of History and of East Asian Culture and Languages

FRANK ALEXANDER FEKETE, Ph.D.<sup>1</sup> (Rhode Island at Kingston, Rutgers), 1983-Associate Professor of Biology

CHARLES ANTHONY FERGUSON, Ph.D. (Oberlin, Ohio State), 1967-Associate Professor of French and Italian

LORE SCHEFTER FERGUSON, Ph.D. (Hartwick, Ohio State), 1990-Visiting Assistant Professor of German

DEANE WILLIAM FERM, Ph.D.<sup>7</sup> (College of Wooster, Yale), 1989-Professor of Religion

GUY THEOPHILE FILOSOF, M.A. '81, Ph.D.<sup>3</sup> (Rollins, Middlebury, Rochester), 1969-Professor of French

DAVID WARREN FINDLAY, Ph.D. (Acadia [Canada], Purdue), 1985-Assistant Professor of Economics

DAVID H. FIRMAGE, M.A. '88, Ph.D. (Brigham Young, Montana), February 1975-Professor of Biology

ROBERT FISCH, Ph.D. (Harvey Mudd, Claremont, Wisconsin at Madison), 1990-Assistant Professor of Mathematics and Computer Science

ELIZABETH ANN FISHER, Ph.D.<sup>7</sup> (Wheaton, Colorado, Case Western Reserve), 1990-Visiting Assistant Professor of Administrative Science

JAMES RODGER FLEMING, Ph.D. (Pennsylvania State, Colorado State, Princeton), 1988-Assistant Professor of Science-Technology Sudies

BRUCE EDWARD FOWLES, Ph.D. (Brown, California at Berkeley), 1967-Associate Professor of Biology

BATYA FRIEDMAN, Ph.D. (California at Berkeley), 1991-Clare Boothe Luce Assistant Professor of Mathematics and Computer Science

STEVEN GALE, B.A. (Exeter [England]), January-May 1992 Visiting Artist in Performing Arts

KENNETH S. GANZA, M.A. (Wabash, Indiana), 1989-Ziskind Lecturer in East Asian Studies and in Art

FREDERICK ARTHUR GEIB, M.A. '75, Ph.D.' (New Hampshire, Brown, Syracuse), 1955-91 Professor of Sociology

HENRY ALBERT GEMERY, M.A. '77, Ph.D. (Southern Connecticut, Harvard, Pennsylvania), 1961-

Dana Professor of Economics

REBECCA LYNN GERBER, Ph.D. (California State at San Jose, California at Santa Barbara), 1985-

Assistant Professor of Music

CHERYL TOWNSEND GILKES, Ph.D. (Northeastern), 1987-John D. MacArthur Associate Professor of Sociology and of African-American Studies

ROBERT A. GILLESPIE, Ph.D.<sup>4</sup> (Cornell, Iowa), 1971-77, 1982-Associate Professor of English; College Editor

KEMP FREDERICK GILLUM, M.A. '65, Ph.D. (Illinois, Wisconsin), 1948-Professor of History

JAVIER GONZALEZ-ALONSO, Ph.D.<sup>5</sup> (University of Washington), 1985-Assistant Professor of Spanish; Resident Director of Colby in Cuernavaca Program, September-December 1988-90

JILL PAULETTE GORDON, M.A. (Claremont McKenna, Brown), 1990-Instructor in Philosophy

HUGH JAMES GOURLEY III, A.B. (Brown), April 1966-Faculty Member without Rank: Director of the Museum of Art

FERNANDO QUADROS GOUVÊA, Ph.D. (Universidade de São Paulo [Brazil], Harvard), 1991-Assistant Professor of Mathematics

ARTHUR DAVID GREENSPAN, M.A. '91, Ph.D.<sup>2</sup> (Columbia, Indiana), 1978-Professor of French; Resident Director of Colby in Caen Program, 1988-91

PAUL GENE GREENWOOD, Ph.D. (Knox, Florida State), 1987-Assistant Professor of Biology

LAURA MARIE HALLDORSON, A.B. (Princeton), 1989-Adjunct Assistant Professor of Physical Education

JONATHAN FRANCIS HALLSTROM, Ph.D.<sup>1</sup> (Oregon State, Iowa), 1984-Associate Professor of Music

DAVID HANSON, Ph.D. (Harvard), 1990-Assistant Professor of Russian; Director of Academic Computing

NATALIE BETH HARRIS, Ph.D.<sup>7</sup> (Indiana), 1978-80, 1982-85, 1986-Associate Professor of English

PETER BROMWELL HARRIS, M.A. '89, Ph.D. (Middlebury, Indiana), 1974-Professor of English

CHARLES STEWART HAUSS, M.A. '90, Ph.D. (Oberlin, Michigan), 1975-Professor of Government

BEVERLY GALE HAWK, Ph.D. (John Carroll, Howard, Wisconsin), 1985-92 Assistant Professor of Government

ROBIN A. S. HAYNES, Ph.D. (Michigan, Eastern Michigan, Bowling Green), 1989-91 Visiting Assistant Professor of American Studies and of Art

HOMER T. HAYSLETT, JR., M.A. '88, Ph.D. (Bridgewater, Virginia Polytechnic, Dartmouth), 1962-Professor of Mathematics

Professor of Mathematics

PATRICIA BURTON HELM, M.A. (Colorado College, Pennsylvania), 1990-Visiting Instructor

PEYTON RANDOLPH HELM, M.A. '90, Ph.D. (Yale, Pennsylvania), 1988-Professor of Classics; Vice President for Development and Alumni Relations

ANTHONY PAUL HESS, M.S. (Oregon, Columbia), July 1986-Faculty Member without Rank: Art and Music Librarian YUKIKO HIRAKATA, M.A. (International Christian University), 1989-91 Visiting Instructor in Japanese

JAN STAFFORD HOGENDORN, M.A. '76, Ph.D. (Wesleyan, London School of Economics), 1963-64, 1966-The Grossman Professor of Economics

ALFRED WILLIAM HOLLIDAY, M.S. (Salisbury State, Central Connecticut State), 1991-Adjunct Instructor in Physical Education and Athletics

CONSTANTINE HRISKOS, M.A. (Lafayette, New School for Social Research), 1990-Visiting Assistant Professor of Anthropology

PAMELA HRONEK, Ph.D. (Brigham Young, Utah, Arizona State), 1990-Visiting Assistant Professor of History

YEAGER HUDSON, M.A. '77, Ph.D.<sup>5</sup> (Millsaps, Boston University), 1959-Professor of Philosophy

JANE HARLOW HUNTER, Ph.D.<sup>1</sup> (Yale), 1980-91 Associate Professor of History

LLOYD C. IRLAND, Ph.D.<sup>7</sup> (Michigan, Arizona, Yale), 1990-91 Visiting Assistant Professor of Economics

PATRICE FRANKO-JONES, Ph.D.<sup>1</sup> (Bucknell, Notre Dame), 1986-Assistant Professor of Economics and of International Studies

PETER H. KAHN, Ph.D. (California at Berkeley), 1991-Visiting Assistant Professor of Education

ROBERT HURD KANY, Ph.D. (Michigan, Pennsylvania State), February 1970-Associate Professor of History; Director of Special Programs

TONI DINSMORE KATZ, M.S. (Maine at Portland, Simmons), 1983-Faculty Member without Rank: Reference Librarian

DAVID L. KEENAN, Ph.D. (Dartmouth, Harvard), 1985-91 Assistant Professor of Chinese Language and Literature

STEPHEN KECSKEMETHY, D.Mus. '86, B.Mus., Artist's Diploma (Eastman), 1986-Artist in Residence in Music

GAY KEMPTON, M.A.E.<sup>7</sup> (Michigan State, Findlay, Rhode Island School of Design), 1990-Visiting Instructor in Art

EDWIN JAMES KENNEY, JR., M.A. '82, Ph.D. (Hamilton, Cornell), 1968-Professor of English

SUSAN MCILVAINE KENNEY, M.A. '86, Ph.D.<sup>1, 7</sup> (Northwestern, Cornell), 1968-Professor of English

DIANE SKOWBO KIERSTEAD, M.A. '89, Ph.D. (Miami [Ohio], Brandeis), 1974-Professor of Psychology

D. WHITNEY KING, Ph.D. (St. Lawrence, Rhode Island), 1989-Assistant Professor of Chemistry

WILLIAM MARTIN KLEIN, M.A. (Northwestern, Princeton), 1991-Assistant Professor of Psychology

YVONNE RICHMOND KNIGHT '55, M.A. '79, M.B.A. (Colby, Cornell), 1958-Professor of Administrative Science

GREGORY GALE KOLDEN, Ph.D. (St. Olaf, Northwestern), 1988-Assistant Professor of Psychology

DOROTHY MARIE KOONCE, M.A. '80, Ph.D. (Cornell, Pennsylvania), 1963-Professor of Classics

HOWARD LEE KOONCE, M.A. '80, Ph.D. (Dartmouth, Pennsylvania), 1963-Professor of English and of Performing Arts

HUBERT CHRISTIAN KUETER, Ph.D. (Valparaiso, Michigan), 1965-Associate Professor of German

KAREN KUSIAK, M.Ed. (Colby, Lesley), 1990-Visiting Instructor in Education

JAY BRIAN LABOV, Ph.D.<sup>2</sup> (Miami [Florida], Rhode Island), 1979-Associate Professor of Biology

CHARLES RICHARD LAKIN, M.L.S.<sup>2</sup> (U.S. Naval Academy, Iowa), 1985-Faculty Member without Rank: Reference Librarian

RONALD LANTZ, D.Mus. '86, B.Mus. (Indiana, Juilliard), 1986-Artist in Residence in Music

JOSEPH LEE, M.A., M.R.I.A.<sup>7</sup> (Cambridge [England]), 1991-92 Visiting Professor of Government

WILLIAM A. LEE, J.D.<sup>7</sup> (Florida), February-May 1987-Assistant Professor of Administrative Science

CAROL BAKER LIBBY, Ph.D.<sup>3</sup> (Pennsylvania State), 1985-86, 1987-91 Assistant Professor of Chemistry

RICHARD DANIEL LIBBY '68, Ph.D. (Colby, Pennsylvania State), 1985-92 Assistant Professor of Chemistry

JOHN ROBERT LIKINS, M.L.S.<sup>6</sup> (Colgate, Simmons), November 1984-Faculty Member without Rank: Technical Services Librarian

IRINA LIVEZEANU, Ph.D.<sup>1, 4</sup> (Swarthmore, Michigan), 1987-91 Assistant Professor of History

YUET KEUNG LO, Ph.D. (Hong Kong Shue Yan, Michigan at Ann Arbor, Beijing), 1991-Visiting Assistant Professor of Chinese

THOMAS RICHMOND WILLIS LONGSTAFF, M.A. '84, Ph.D.<sup>2</sup> (Maine, Bangor Theological, Columbia), 1969-Professor of Religion

DAVID MARTIN LUBIN, Ph.D.<sup>1</sup> (Ohio State, Yale), 1983-Associate Professor of Art and of American Studies

ABBES MAAZAOUI, Ph.D. (Lycee 9 Avril [Tunisia], University of Tunis [Tunisia]), 1991-Visiting Assistant Professor of French

PAUL STUART MACHLIN, M.A. '87, Ph.D. (Yale, California at Berkeley), 1974-Professor of Music GEORGE CALVIN MACKENZIE, M.A.'86, Ph.D.<sup>4</sup> (Bowdoin, Tufts, Harvard), 1978-Professor of Government; Vice President for Development and Alumni Relations, 1985-88

L. SANDY MAISEL, M.A. '83, Ph.D. (Harvard, Columbia), 1971-Dana Professor of American Democratic Institutions; Director of Colby in Washington Program, 1987-

PHYLLIS FRANCES MANNOCCHI, Ph.D.<sup>4</sup> (Pennsylvania, Columbia), 1977-Associate Professor of English

MICHAEL ANDREW MARLAIS, Ph.D.<sup>1</sup> (St. Mary's of California, California at Hayward, Michigan), 1983-Associate Professor of Art

CAROLE FRANCE MARTIN, License de Cinema (Université de la Sorbonne Nouvelle [Paris]), 1990-91

Visiting Assistant Professor of French

JOHN L. MARTIN, B.A.<sup>7</sup> (Maine), 1989-Visiting Instructor in Government

MICHAEL FREDERICK MARTIN, Ph.D. (Massachusetts at Amherst, Michigan), 1989-91 Visiting Assistant Professor of Economics

D. BENJAMIN MATHES, Ph.D. (Middlebury, New Hampshire), 1990-Assistant Professor of Mathematics

HARRIETT MATTHEWS, M.A. '84, M.F.A. (Sullins Junior, Georgia), 1966-Professor of Art

ALBERT ANTHONY MAVRINAC, M.A. '58, Ph.D., J.D.<sup>8</sup> (Pittsburgh, Harvard, Maine), 1958-Dana Professor of Government

MARILYN SWEENEY MAVRINAC, M.A.<sup>7</sup> (Wellesley, Columbia), 1963-64, 1967-68, 1969-Associate Professor of Education and of History

ROBERT PAUL MCARTHUR, M.A. '83, Ph.D. (Villanova, Temple), 1972-Professor of Philosophy; Vice President for Academic Affairs and Dean of Faculty, 1988-

SHANNON LEE MCARTHUR, M.F.A.<sup>7</sup> (Rosemont, Indiana), 1990-91 Visiting Assistant Professor of Art

SHEILA M. MCCARTHY, Ph.D. (Emmanuel, Harvard, Cornell), 1987-Associate Professor of Russian

GERALD THOMAS MCDOWELL '76, B.A. (Colby), 1989-Adjunct Assistant Professor of Physical Education

DOUGLAS M. MCELROY, M.S.<sup>7</sup>, (Southampton, Maine), 1991-Visiting Instructor in Biology

RICHARD JOHN MCGEE, M.A. '86, M.S.<sup>3</sup> (Maine), 1967-Professor of Physical Education; Director of Athletics, 1967-87

JAMES RICHARD MCINTYRE, Ph.D. (Michigan State), 1976-Associate Professor of German; Resident Director of Colby in Lübeck Program, February-May 1992

CHARLES ABBOTT MEADER, M.F.A.<sup>2,7</sup> (Dartmouth, Colorado), 1961-1974, 1983-Associate Professor of Art

NANCY BRECHT MEADER, B.A.<sup>7</sup> (Colorado at Boulder), September-January, 1990-Visiting Instructor in French; Resident Director of Colby in Dijon Program

JAMES WILLIAM MEEHAN, JR., M.A. '82, Ph.D. (Saint Vincent, Boston College), 1973-Professor of Economics

MARGARET PACKARD MENCHEN, M.L.S. (Maine), 1989-Faculty Member without Rank: Reference Librarian

EDWARD JAMES MESTIERI, M.Ed. (Springfield, Norwich), 1989-Adjunct Assistant Professor of Physical Education

ROGER NATHAN METZ, M.A. '85, Ph.D.<sup>11</sup> (Oberlin, Cornell), 1968-91 Professor of Physics

JULIE TAMSEN MILLARD, Ph.D. (Amherst, Brown), 1991-Clare Boothe Luce Assistant Professor of Biochemistry

DAVID HORTON MILLS '57, M.A.<sup>7</sup> (Colby, Illinois, Harvard), 1980-81, 1984-Visiting Adjunct Assistant Professor of English for Speech and Debate

JOHN S. MIZNER, M.A. '80, Ph.D.<sup>3</sup> (Antioch, Pennsylvania), 1963-Professor of English

RICHARD LEE MOE, Ph.D. (California at Berkeley), 1990-91 Visiting Instructor in Biology

THOMAS JACK MORRIONE '65, M.A. '85, Ph.D.<sup>5</sup> (Colby, New Hampshire, Brigham Young), 1971-

Professor of Sociology

JANE MERYL MOSS, M.A. '90, Ph.D.<sup>1</sup> (Wellesley, Yale), 1979-Professor of French

RICHARD JAMES MOSS, M.A. '90, Ph.D.<sup>2</sup> (Michigan State), 1978-Professor of History

SUANNE WILSON MUEHLNER, M.L.S., M.B.A. (California at Berkeley, Simmons, Northeastern), 1981-

Faculty Member without Rank: Director of the Colby Libraries

BARBARA KUCZUN NELSON '68, M.A.<sup>7</sup> (Colby, Middlebury), 1978-Instructor in Spanish

CARL E. NELSON, M.Ed. (Boston University, Maine), November 1967-Adjunct Associate Professor of Physical Education; Director of Health Services

RANDY ALAN NELSON, M.A. '90, Ph.D. (Northern Illinois, Illinois), 1987-Professor of Economics and of Administrative Science

ROBERT EDWARD NELSON, Ph.D. (San Francisco State, University of Washington), 1982-Associate Professor of Geology

JAMES I. NORTHRUP, Ph.D. (Davidson, North Carolina State), 1990-Visiting Assistant Professor of Mathematics and Computer Science

DAVID LESLIE NUGENT, Ph.D. (Michigan, Columbia), 1989-Assistant Professor of Anthropology

JORGE OLIVARES, Ph.D. (Miami [Florida], Michigan), 1982-Associate Professor of Spanish PATRICIA ARNOLD ONION, Ph.D.<sup>7</sup> (Connecticut College, Harvard), 1974-Associate Professor of English

LAURIE ENNIS OSBORNE, Ph.D. (Yale, Syracuse), 1990-Assistant Professor of English

ADRIANNA MARIA PALIYENKO, Ph.D. (North Carolina at Chapel Hill, Boston University, North Carolina at Chapel Hill), 1989-Assistant Professor of French

FRANCES M. PARKER, M.L.S. (Harpur, Columbia), August 1974-Faculty Member without Rank: Assistant Director for Public Services, Library

FRANCIS M. PARKER, Ph.D. (Evansville, Indiana, Harvard), 1990-91 Visiting Professor of Philosophy

HAROLD RICHARD PESTANA, M.A. '85, Ph.D. (California, Iowa), 1959-Professor of Geology; Resident Director of Bermuda Semester, 1991

RAYMOND B. PHILLIPS, Ph.D. (Pomona, California at Berkeley), 1984-Assistant Professor of Biology; Director of Computer Services

AARON T. PICKERING '85, M.S. (Colby, Oregon), 1991-92 Visiting Instructor in Physics

JAMES SMITH PIERCE, Ph.D. (Oberlin, Harvard), 1990-91 Visiting Professor of Art

DEBORAH ANN PLUCK, M.Ed. (Slippery Rock, Maine), 1979-Adjunct Associate Professor of Physical Education

RUSSELL A. POTTER, M.A. (Evergreen State, Syracuse), 1991-Instructor in English

TAMAE KOBAYASHI PRINDLE, Ph.D. (S.U.N.Y. at Binghamton, Washington State, Cornell), 1985-

Associate Professor of Japanese

MARILYN RUTH PUKKILA, M.A., M.S.L.S.<sup>1</sup> (Michigan at Ann Arbor, Aberystwyth [Wales], Columbia), March 1984-Faculty Member without Rank: Reference Librarian

VIVIAN K. PYLE, M.A.<sup>7</sup> (Princeton, California at Berkeley), 1990-Visiting Instructor in Russian

HAROLD BRADFORD RAYMOND, M.A. '68, Ph.D.<sup>8</sup> (Black Mountain, Harvard), 1952-Professor of History

SCOTT HALL REED III, M.F.A. (Rhode Island School of Design), February 1987-Assistant Professor of Art

LEONARD S. REICH, Ph.D. (Bucknell, Johns Hopkins), February 1986-Associate Professor of Administrative Science

CLIFFORD REID, M.A. '89, Ph.D. (George Washington, Princeton), 1987-Professor of Economics

URSULA REIDEL-SCHREWE, Ph.D. (Harvard), 1989-Assistant Professor of German; Resident Director of Colby in Lübeck Program, February-May 1991

DOUGLAS EDWARD REINHARDT '71, M.B.A. (Colby, Babson), 1972-Faculty Member without Rank: Associate Vice President for Finance and Treasurer

DOROTHY SWAN REUMAN, M.A.<sup>7</sup> (Wooster, Wisconsin), 1961-64, 1966-92 Associate Professor of Music

ROBERT EVERETT REUMAN, M.A. '69, Ph.D.<sup>7</sup> (Middlebury, Pennsylvania), 1956-91 Dana Professor of Philosophy

SARANNA ROBINSON '81, Ph.D.<sup>4</sup> (Colby, Texas, Carnegie-Mellon), 1989-Assistant Professor of Economics

KENNETH AARON RODMAN, Ph.D. (Brandeis, Massachusetts Institute of Technology), 1989-Associate Professor of Government

PHYLLIS ROGERS, Ph.D. (Temple, Colorado, Princeton, California at Los Angeles), 1989-Assistant Professor of American Studies and of Anthropology

NICHOLAS LEROY ROHRMAN, M.A. '77, Ph.D.<sup>6</sup> (Butler, Miami [Ohio], Indiana), 1977-Professor of Psychology

HANNA M. ROISMAN, Ph.D. (Tel Aviv University, Washington at Seattle), 1990-Visiting Associate Professor of Classics

JOSEPH ROISMAN, Ph.D. (Tel Aviv University, Washington at Seattle), 1990-Visiting Associate Professor of Classics and of History

SONYA ORLEANS ROSE, Ph.D. (Antioch, Northwestern), 1977-Associate Professor of Sociology

JONAS OETTINGER ROSENTHAL, M.A. '83, M.A.<sup>10</sup> (Swarthmore, North Carolina), 1957-Professor of Sociology

DAVID R. ROSS, Ph.D. (Williams, Northwestern), 1991-Visiting Assistant Professor of Economics

PAUL ROSS, D.Mus. '86, Artist's Diploma (Toronto Conservatory, Juilliard), 1986-Artist in Residence in Music

MARY LORRAINE RUEFLE, M.A. (Bennington, Hollins), 1991-Visiting Assistant Professor of English

JAMES RICHARD RUSSO, Ph.D. (Arizona), 1991-Professor of English

DIANNE FALLON SADOFF, M.A. '88, Ph.D.<sup>2, 4, 9</sup> (Oregon, Rochester), 1980-81, 1982-Professor of English

IRA SADOFF, M.A. '88, M.F.A.<sup>2,9</sup> (Cornell, Oregon), 1977-Professor of English

ROSALEEN MARIE SALVO, M.A. (North Carolina at Greensboro), 1991-Visiting Instructor in History

JEAN MARIE SANBORN, Ph.D. (Mount Holyoke, Harvard, Union for Experimenting Colleges and Universities), 1976-Associate Professor of English; Director of the Writers' Center JOHN SANTOS, Ph.D. (Knox, Illinois), 1985-92 Assistant Professor of Economics

BETTY GAIL SASAKI, M.A. (California at Santa Barbara, California at Berkeley), 1990-Instructor in Spanish

STEVEN EARL SAUNDERS, Ph.D. (Carnegie-Mellon, Pittsburgh), 1990-Assistant Professor of Music

JANICE ARMO SEITZINGER, M.A. (New York at Stony Brook, Boston College), 1974-Faculty Member without Rank: Dean of Students

RICHARD CRITTENDEN SEWELL, M.A., 1974-Adjunct Associate Professor of Performing Arts; Director of Powder and Wig; Resident Director of Colby in London Program, January-May 1992

THOMAS WAYNE SHATTUCK, Ph.D.<sup>2</sup> (Lake Forest, California at Berkeley), 1976-Associate Professor of Chemistry

ROBIN ELIZABETH SHERLOCK, M.A. (Bucknell, Rochester), 1991-Visiting Instructor in English

DAVID LAWRENCE SIMON, M.A. '88, Ph.D. (Boston University, London), 1981-Jetté Professor of Art

SONIA CHALIF SIMON, Ph.D.<sup>7</sup> (Boston University), 1982-Associate Professor of Art

NIKKY-GUNINDER KAUR SINGH, Ph.D.<sup>5</sup> (Wellesley, Pennsylvania, Temple), 1986-Assistant Professor of Religion

DALE JOHN SKRIEN, Ph.D. (Saint Olaf, Washington), 1980-Associate Professor of Mathematics and Computer Science

DONALD BRIDGHAM SMALL, Ph.D.<sup>2</sup> (Middlebury, Kansas, Connecticut), 1968-Associate Professor of Mathematics

EARL HAROLD SMITH, B.A. (Maine), 1962. Associate Professor; Dean of the College

THOMAS EDWARD SMITH, M.S. (Brown, Illinois), 1991-Adjunct Instructor in Physical Education and Athletics

WAYNE LEE SMITH, M.A. '83, Ph.D. (Hartwick, Pennsylvania State), 1967-Professor of Chemistry

DEBRA ANNE SOIFER, Ph.D. (George Washington, Chicago), 1990-91 Visiting Assistant Professor in Asian Religion

JEFFREY GREENE STIRLING, D.M. (Yale, Northwestern), 1990-91 Visiting Instructor in Music

ANNA MARIA SULLIVAN, B.A. (Kent at Canterbury [England]), September-December 1991 Visiting Artist in Performing Arts

NINA JEROME SUTCLIFFE, M.A.E. (Mount Holyoke, Rhode Island School of Design), 1991-Visiting Associate Professor of Art

JOHN ROBERT SWENEY, M.A. '82, Ph.D. (Colorado College, Claremont, Wisconsin), 1967-Professor of English

LAWRENCE HENRY TANNER, Ph.D. (Williams, Tulsa, Massachusetts), 1990-91 Visiting Assistant Professor of Geology

MARK BENNETT TAPPAN, Ed.D. (Oberlin, Ohio State, Harvard), 1991-Assistant Professor of Education

LINDA TATELBAUM, Ph.D.<sup>7</sup> (Cornell), 1982-Assistant Professor of English

MARGRIT LICHTERFELD THOMAS, M.A. (Harvard), 1985-Assistant Professor of German; Associate Dean of Faculty, 1989-

JAMES CAMPBELL THURSTON, M.F.A. (Ohio Wesleyan, Northwestern), 1988-Adjunct Assistant Professor of Performing Arts

THOMAS HARRY TIETENBERG, M.A. '84, Ph.D.<sup>1</sup> (U.S.A.F. Academy, University of the East in the Philippines, Wisconsin), 1977-Christian A. Johnson Distinguished Teaching Professor of Economics

NEAL H. WALLS, Ph.D. (William and Mary, Virginia, Johns Hopkins), 1991-Visiting Assistant Professor of Religion

JAMES L. A. WEBB, JR., Ph.D.<sup>2</sup> (Johns Hopkins), 1987-Assistant Professor of History

ADAM MURRAY WEISBERGER, Ph.D.<sup>2</sup> (Haverford, Pennsylvania), 1989-Assistant Professor of Sociology

ROBERT STEPHEN WEISBROT, M.A. '90, Ph.D.<sup>5</sup> (Brandeis, Harvard), 1980-Professor of History

DACE WEISS, M.A.<sup>7</sup> (Toronto), 1981-Instructor in French

JONATHAN MARK WEISS, M.A. '86, Ph.D. (Columbia, Yale), 1972-Professor of French; Director of Off-Campus Programs, 1990-

CHRISTINE M. WENTZEL, M.A. (Massachusetts, Michigan), 1973-Adjunct Associate Professor of Performing Arts (Dance)

GINA S. WERFEL, M.F.A.<sup>1, 2</sup> (Kirkland, Columbia), 1980-Associate Professor of Art

JAMES BENJAMIN WESCOTT, M.S. (Plymouth State, Indiana), 1978-Adjunct Associate Professor of Physical Education

PETER WESTERVELT, M.A. '78, Ph.D.<sup>10</sup> (Harvard), 1961-Professor of Classics

MAUREEN CONSTANCE WHALEN, Ph.D. (Rutgers, California at Berkeley), 1989-Clare Boothe Luce Assistant Professor of Biology

RICHARD LATHAM WHITMORE, JR., M.A. '90, M.Ed. (Bowdoin, Maine), 1970-Adjunct Professor of Physical Education; Director of Athletics 1987-

DEXTER CONWELL WHITTINGHILL III, Ph.D. (Middlebury, Wisconsin at Milwaukee, Purdue), 1989-

Assistant Professor of Mathematics

LINDSAY B. WILSON, Ph.D. (Wesleyan, Stanford), 1985-Assistant Professor of History

WILLIAM HERBERT WILSON, JR., Ph.D. (North Carolina, Johns Hopkins), 1990-Assistant Professor of Biology

JOYLYNN WING, Ph.D.<sup>6</sup> (San Francisco State, Stanford), 1988-Assistant Professor of Performing Arts and English

W. ARNOLD YASINSKI, M.A. '90, M.B.A., Ph.D. (Michigan, Indiana), 1990-Professor of English; Administrative Vice President

EDWARD HARRY YETERIAN, M.A. '91, Ph.D. (Trinity, Connecticut), 1978-Professor of Psychology

GLENN DORIN ZOHNER, Ph.D. (Brigham Young, Massachusetts), 1963-66, 1969-Associate Professor of Psychology

<sup>1</sup>On leave full year 1990-91.
<sup>2</sup>On leave full year 1991-92.
<sup>3</sup>On leave first semester 1990-91.
<sup>4</sup>On leave first semester 1991-92.
<sup>5</sup>On leave second semester 1990-91.
<sup>6</sup>On leave second semester 1991-92.
<sup>7</sup>Part-time.
<sup>8</sup>Reduced time.
<sup>9</sup>Professors Dianne and Ira Sadoff share a joint appointment.
<sup>10</sup>On medical leave.
<sup>11</sup>Died May 14, 1991.

## **Applied Music Associates**

MARY JO CARLSEN, B.A., B.Mus. (University of Washington), 1985-Violin; Concertmistress

CARL DIMOW, B.M. (Southern Maine), 1981-Guitar

DENNIS HARRINGTON, M.S. (Crane School of Music, Ithaca College, Seattle Pacific), 1987-Trumpet

MARK LEIGHTON, M.A. (New England Conservatory), 1981-Classical Guitar

KAREN PIERCE, B.M. (Temple), 1989-Voice

JEAN ROSENBLUM, B.A. (Oberlin), 1973-Flute

CHERYL A. TSCHANZ, D.M.A. (Indiana, S.U.N.Y. at Stony Brook), 1991-Piano

WILLIAM WALLACE, B.M. (Oberlin), 1974-91 Piano

## Marshals

YVONNE RICHMOND KNIGHT, M.B.A. College Marshal

YEAGER HUDSON, Ph.D. CAROL HOFFER BASSETT, M.A. THOMAS WAYNE SHATTUCK, Ph.D. Assistant College Marshals

EARL HAROLD SMITH, B.A. Platform Marshal

### **Research Associates**

LINDA LEHMANN GOLDSTEIN, Ph.D., 1990-Research Associate in American Studies

BETSY BROWN, Ph.D., 1990-RICHARD LEE MOE, Ph.D., 1989-Research Associates, Biology

#### Associates, Assistants, and Interns

ELIZABETH S. CHAMPLIN '65, M.S., 1971-TIMOTHY CHRISTENSEN, B.S., 1985-LINDSEY W. COLBY, M.S., 1986-Teaching Associates in Biology

AUSTIN SEGEL, M.A., 1986-Animal Care Technician in Biology

JEAN MCINTYRE, B.A., 1976-Teaching Associate in Chemistry

ROSEMARY D. FLANAGAN, B.A., 1990-Teaching Assistant in Chemistry

BRUCE RUEGER, M.S., 1984-Teaching Associate in Geology

PAUL CHUNKO, 1984-Scientific Instrument Maintenance Technician

MARC DAMITZ, 1991-92 Language Assistant, German

NORIKO KATAGIRI, 1989-92 Language Assistant, Japanese

CHRISTINA DE VEGA MARTIN, 1990-91 Language Assistant, Spanish

ANTJE NEUMANN, 1990-91 Language Assistant, German XU TAO, 1990-92 Visiting Exchange Instructor, Chinese

SARAH SUSANNAH WILLIE, ABD (Haverford, Northwestern), 1991-Minority Scholar in Residence, Sociology

AARON PICKERING '85, 1988-91 Teaching Associate in Physics

MARY LOUISE BARTONSENSKI, M.A., 1989-Intern, Writing Center

JOHN DOUGLAS ERVIN, B.A., 1989-Technical Director, Performing Arts

## **College Committees**

The president of the College and the dean of faculty are members *ex officio* of all committees of the College. Most of these committees are comprised of faculty, students, and administrators.

Administrative Admissions International Student Admissions Appeals Board Athletics Bookstore Computer **Educational Policy** Foreign Study Council Course Approval Faculty Course Evaluation **Financial Aid Financial Priorities** Independent Study Library Student Affairs

### **Faculty Committees**

Academic Standing Advisory Committee on Faculty Personnel Policies Grievance Hearing Committee for Dismissal Proceedings Nominating Promotion and Tenure Research, Travel, and Sabbatical Leaves

## Other Committees or Councils

Advisory Committee on Foreign Student Admissions Advisory Committee on Investment Responsibility Advisory Committee on the Use of Human Subjects in Research Affirmative Action Committee

All Campus Lecture Committee Bunche Scholars Committee Committee to Fund Students' Special Projects Fellowship Advisory Board Health Care Advisory Committee Humanities Grants Committee Institutional Animal Care and Use Committee Interdisciplinary Programs Lipman Lecture Committee Lovejoy Planning Natural Sciences Grants Committee Professional Preparation, Business and Law Professional Preparation, Health Professions Racial Harassment Advisory Group **Radiation Safety Committee** Science Planning Sexual Harassment Advisory Group Social Sciences Grants Committee

## Administration 1991-92

President, WILLIAM R. COTTER, M.A. '79, L.H.D., J.D., 1979-Administrative Assistant to the President, CAROL A. WELCH, B.S., 1973-Corporate Secretary, SIDNEY W. FARR '55, M.A., M.B.A., 1960-Vice President for Academic Affairs and Dean of Faculty, ROBERT P. MCARTHUR, M.A. '83, Ph.D., 1972-Associate Dean of Faculty, MARGRIT LICHTERFELD, M.A., 1985-Director of Off-Campus Study, JONATHAN M. WEISS, Ph.D., 1972-Associate Director of Off-Campus Study, ELIZABETH C. TODRANK, M.Ed., 1961-Associate Director of Off-Campus Study, LINDA K. COTTER, M.Ed., 1982-Administrative Assistant, LILLIAN LEVESQUE, 1978-Registrar, GEORGE L. COLEMAN II, M.A., 1963-Director of the Colby Libraries, SUANNE W. MUEHLNER, M.L.S., M.B.A., 1981-Assistant Director for Public Services, FRANCES M. PARKER, M.L.S., 1974-Audiovisual Librarian, SAMUEL L. ATMORE, M.S., 1977-Reference Librarian, TONI D. KATZ, M.S., 1983-Reference Librarian, CHARLES R. LAKIN, M.L.S., 1985-Reference Librarian, JOHN R. LIKINS, M.L.S., 1984-Reference Librarian, MARILYN R. PUKKILA, M.S.L.S., M.A., 1984-Science Librarian, SUSAN W. COLE, M.S., 1978-Art and Music Librarian, ANTHONY P. HESS, M.S., 1986-Director of the Museum of Art, HUGH J. GOURLEY III, A.B., 1966-Assistant to the Director/Registrar, LYNN DEAN MARSDEN-ATLASS, M.A., 1989-Museum Preparator, GREGORY J. WILLIAMS, 1990-Administrative Vice President, W. ARNOLD YASINSKI, Ph.D., M.B.A., 1990-Administrative Assistant, LILLIAN LEVESQUE, 1978-Director of Personnel Services, DOUGLAS C. TERP'84, 1987-Administrative Assistant to the Director, BONNIE L. SMITH, B.S., 1986-Associate Vice President for Finance and Treasurer, DOUGLAS E. REINHARDT '71, M.B.A., 1972-Administrative Assistant to the Treasurer, PAMELA LEO, 1981-Controller, ROBERT ST. PIERRE, M.B.A., 1985-Associate Controller, CYNTHIA W. WELLS '83, 1983-Director of Administrative Services, KENNETH T. GAGNON, B.A., 1981-Assistant Director of Administrative Services, JANE M. ROBERTSON, B.A., 1990-Bookstore Manager, BRUCE K. BARNARD, M.Ed., 1987-Assistant Manager, DIANE GAGNON, 1979-Operations Assistant, WILLIAM U. POTTLE, 1980-Director of Computer Services, RAYMOND B. PHILLIPS, Ph.D., 1984-Associate Director for Academic Computing, DAVID HANSON, Ph.D., 1990-Central Computing/Statistics Consultant, GUANGYING (GRETA) JI, M.S., M.A., 1988-Personal Computer Consultant, RURIK SPENCE, 1988-User Consultant, PAULA KROG, 1983-Associate Director for Administrative Computing, JUDITH B. JUDKINS, B.A., 1978-Systems Analyst, ELIZABETH S. HALLSTROM, M.F.A., 1987-Systems Analyst, JOSEPH M. MEDINA, B.A., 1987-

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Director of Financial Aid, LUCIA W. SMYTH '73, 1986-Associate Director of Financial Aid, LUDGER H. DUPLESSIS, B.A., 1990-Financial Aid Assistant, THERESA HUNNEWELL, A.S., 1976-Dean of the College, EARL H. SMITH, B.A., 1962-Administrative Assistant to the Dean of the College for Scheduling and Facilities, KAREN R. L. BOURASSA, A.S., 1981-Chaplains: Catholic, FATHER JOHN MARQUIS 'SM, B.A., 1989-Jewish, RABBI RAYMOND KRINSKY, M.H.L., 1984-Protestant, RONALD E. MORRELL, 1984-Director of Career Services, CYNTHIA P. YASINSKI, M.B.A., 1991-Associate Director of Career Services, CATE T. ASHTON '80, M.A., 1987-Administrative Assistant to the Director, PENNY A. SPEAR, A.S., 1978-Dean of Students, JANICE A. SEITZINGER, M.A., 1974-Director of Student Activities, TULLIO Z. NIEMAN, M.A., 1990-Assistant Director of Student Activities, PATRICIA HELM, M.A., 1988-Assistant Director of Student Activities, REGINA M. TOMAN, M.S., 1988-Director of Public Safety, MARK VAN VALKENBURGH, M.Ed., 1988-Associate Dean of Students, JOYCE H. MCPHETRES MAISEL, M.A., 1981-Associate Dean of Students, PAUL E. JOHNSTON, B.A., 1982-Associate Dean of Students, MARK R. SERDIENIAN '73, 1982-Tutor and Study Counselor, ELIZABETH C. TODRANK, M.Ed., 1961-Associate Dean of Students for Intercultural Activities, VICTORIA MARES HERSHEY, B.A., 1989-Director of Communications, EDWARD HERSHEY, B.A., 1987-Creative Director, BONNIE BISHOP, M.F.A., 1984-Production Editor, MARTHA F. SHATTUCK, B.A., 1973-College Editor, ROBERT A. GILLESPIE, Ph.D., 1971-77, 1982-Associate Director of Communications, MARY ELLEN MATAVA, B.A., 1988-Assistant Director of Communications, SALLY A. BAKER, B.A., 1989-Assistant Director of Communications, NORA L. CAMERON, B.A., 1983-Communications Intern, CAROL ANNE BEACH '88, 1990-Director of Health Services, CARL E. NELSON, M.Ed., R.P.T.-A.T.C., 1959-Medical Director, H. ALAN HUME, M.D., 1990-College Physician, SUSAN E. COCHRAN, M.D., 1990-College Physician, JANE B. GUDAKUNST, M.D., 1990-Clinical Psychologist, DANIEL A. HUGHES, Ph.D., 1985-Director of Counseling Services, PATRICIA N. HOPPERSTEAD, M.A., 1987-Physician Assistant, ALDEN R. KENT, PA-C/LCSW, 1991-Physician Assistant, JIMMIE J. WOODLEE, B.S., 1988-Head Nurse, MARTHA SEABURY, R.N., 1987-Assistant Trainer, TIMOTHY J. ADAMS, R.P.T., A.T.C., B.S., 1980-Assistant Trainer,

# Enrollment by States and Countries

Classified according to geographical locations of students' homes 1990-91.

	Men	Women	Total		Men	Women	Total
All Areas	864	877	1741	Tennessee	0	1	1
				Texas	8	4	12
Alaska	1	1	2	Utah	1	2	3
Alabama	0	1	1	Vermont	10	17	27
Arizona	3	0	3	Virginia	4	9	13
California	22	31	53	Washington	10	10	20
Colorado	6	6	12	West Virginia	1	0	1
Connecticut	77	92	169	Wisconsin	3	8	11
Delaware	1	3	4	Wyoming	0	1	1
District of							
Columbia	4	6	10	Foreign			
Florida	2	7	9	Countries	24	13	37
Georgia	3	2	5	Bangladesh	0	1	1
Hawaii	0	2	2	Belgium	2	0	2
Idaho	1	4	5	Brazil	0	1	1
Illinois	17	13	30	Canada	6	0	6
Indiana	1	1	2	China	1	0	1
Iowa	1	1	2	France	2	4	6
Kansas	1	2	3	Germany	1	0	1
Kentucky	0	4	4	Guatemala	0	1	1
Louisiana	0	3	3	Hong Kong	1	0	1
Maine	97	118	215	India	2	1	3
Maryland	13	9	22	Japan	2	0	2
Massachusetts	287	276	563	Malawi	3	1	4
Michigan	8	4	12	Pakistan	0	1	1
Minnesota	14	8	22	Sri Lanka	1	0	1
Missouri	4	3	7	Switzerland	1	0	1
Montana	1	0	1	Turkey	0	1	1
Nebraska	1	1	2	United Arab Emirat	tes 0	1	1
Nevada	0	2	2	U.S.S.R.	2	1	3
New Hampshire	39	43	82				
New Jersey	26	26	52				
New Mexico	2	0	2				
New York	86	60	146				
North Carolina	3	2	5				
Ohio	21	22	43				
Oklahoma	1	0	1				
Oregon	2	6	8				
Pennsylvania	31	29	60				
Rhode Island	27	23	50				
	21	1	1				

South Carolina

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# Degrees Awarded at Commencement Sunday, May 26, 1991

## **Bachelor of Arts**

As of the Class of 1935 John W. Hunt, Gardiner, Me.

As of the Class of 1937 Charles N. Nawfel, Waterville, Me.

As of the Class of 1942 Harry Cohen, New Milford, Conn.

As of the Class of 1945 Michael M. Nawfel, Waterville, Me.

As of the Class of 1971 John Michael Fochs, Duluth, Minn.

As of the Class of 1987 Melissa A. McElhenny, Alexandria, Va.

As of the Class of 1989 Victoria Lynn Eanet, New York, N.Y.

As of the Class of 1990 Philip Nathan Tabor, East Corinth, Me.

The Class of 1991 Melissa Louise Ackerly, Abington, Mass. Elizabeth Anne Ackerman, West Brattleboro, Vt. Elizabeth Ann Ackroyd, West Milford, N.J. Eric S. Adams, Rye, N.Y. Charles Martin Allen, Irvington, N.Y. Benjamin Butler Ames, Riverdale, N.Y. David John Anderson, St. Louis Park, Minn. Heather Whiteside Anderson, Mission Hills, Kans. Peter Matthew Antall, Summit, N.J. Robert Lee Arendell, Berkeley, Calif. Garin Kegham Arevian, Norwell, Mass. Todd Loren Astor, Randolph, Mass. Alisa Marie Attardi, Berwyn, Pa. John Harding Avery, Milton, Mass. Jack Reynolds Aydelott, Sugar Hill, N.H. Dale Andrew Bailey, Madawaska, Me. Peter Nelson Bailey, Watchung, N.J.

Elin Melinda Baird, Oreland, Pa. Paul Brosnan Baisley, Glencoe, Ill. Victoria Jean Baldwin, Dexter, Me. Rebecca Cochran Bancroft, Medfield, Mass. Ronald John Barberan, Garden City, N.Y. M. Scott Barkham, Larchmont, N.Y. Douglas Michael Baum, Merrick, N.Y. Edward G. H. Bayliss, Rochester, Minn. Kristin Carol Beisler, Ridgewood, N.J. Gregory Harrison Beitchman, Bronx, N.Y. Timothy Andrew Bernard, Gorhan, Me. Andrew Stanley Bess, Chatham, N.J. Ellen Ruth Billey, Yarmouth, Me. Patricia Biros, Coventry, R.I. Scott Robert Blake, Arlington, Mass. Renée Michele Blanchard, New Orleans, La. Shauna Marie Blanchard, Brimfield, Mass. Roger Stuart Blankfein, Glen Head, N.Y. Rebecca Carolyn Block, Dallas, Texas Robert Andrew Bock, Columbus, Ohio Christine Marion Bonner, Beverly, Mass. Daniel Patrick Bouvier, Marlboro, Mass. Daniel Bowman, Warren, N.J. Rebecca Conant Brackett, Hanover, N.H. Trevor Marshall Braden, Mineola, N.Y. Catherine Breen, Westwood, Mass. Joseph Edward Brennan, Portland, Me. Frederick Graham Bright, Pittsburgh, Pa. Scott Ridgeway Brink, Andover, Mass. Barrett Christopher Brown, Los Altos, Calif. Paige Jessica Brown, South Portland, Me. Sarah True Brown, Candia, N.H. Thomas John Brown, Jr., Westford, Mass. Christopher T. Brownsey, Niskayuna, N.Y. Jeffrey Scott Bryant, Auburn, Me. William John Burke, East Greenwich, R.I. Dean Stanton Burnell, Plaistow, N.H. Robyn Ellen Bussell, Topsham, Me. Jessica Lynn Butler, Seekonk, Mass. Katharine Carroll Button, Marion, Mass.

Julie Christine Campbell, West Lebanon, N.H. Seth Jeremy Canter, Lexington, Mass. Christopher Michael Caponi, Toronto, Ontario Allen Russell Carlson, Cheshire, Conn. Brian Bert Carlson, Glastonbury, Conn. Nathan Scott Carpenter, Kezar Falls, Me. Peter Scott Carpenter, Scarborough, Me. Stephanie Ann Carville, Cape Elizabeth, Me. Joseph Andrew Cattivera, Manhattan Beach, Calif. Steven M. Chernoff, Newton, Mass. James W. Chisholm, Scituate, Mass. Kathleen Clark, Newark, Del. Tyrone Phillip Clerk, Brooklyn, N.Y. William Plummer Clough IV, Bethel, Me. Dina Marie Cloutier, Seekonk, Mass. Matthew Benjamin Cohen, Los Angeles, Calif. Carmine Colarusso, Medford, Mass. Susan Erica Colavecchio, Foxboro, Mass. Alexander Hamilton Post Colhoun, Glyndon, Md. Julia Dolloff Collard, Buffalo, N.Y. Steven Charles Collier, East Hardwick, Vt. Bradley Andrews Comisar, Dayton, Ohio Abigail Joan Cook, Hingham, Mass. James Tremaine Cooper, Bethany, Conn. L. Ricardo Cordon, Pittsfield, Mass. Ashley Meredith Cornell, Old Lyme, Conn. Jared Fairfax Cornell, Lakewood, Ohio Jennifer Cos, Rochester, N.Y. Katharine Budd Cowperthwait, Greenwich, Conn. Jonathan Mark Cox, Morrisville, Vt. Matthew Nelson Cox, Newtown, Conn. Karen Marie Crebase, Wallingford, Conn. David Daniel Crowe, Cincinnati, Ohio Shawn Patrick Crowley, Wakefield, Mass. Carol Patricia Cumming, Stamford, Conn. Susan Kristin Cummings, Sharon, Mass. Margaret Mary Curran, Clifton Park, N.Y. Randall Miles Cutler, Bronxville, N.Y. Jeffrey Patrick D'Alessandro, Lynnfield, Mass. Julie Erin Daniele, Marshfield Hills, Mass. Amy Love Davis, West Suffield, Conn. Laura Elizabeth Davis, Needham, Mass. Paul Charles Davis, Chagrin Falls, Ohio Aditya Dayal, Calcutta, India Annie De Maria, Rockport, Me. Deanna Lynne DeRoche, Haverhill, Mass. Kimberley Lynn Derrington, Bethlehem, N.H. David Mathew Descoteaux, Biddeford, Me.

Angela Ann Desmond, Lincoln, Neb. Paul Louis Diamond, New York, N.Y. Andrew Michael DiMilla, Framingham, Mass. Steven Dimitriou, Andover, Mass. Brian Doherty, Braintree, Mass. Charles Preston Donaldson II, Metrose, Mass. David Andrew Donnelly, South Harpswell, Me. Thomas David Dorion, Bath, Me. Michael Evan Doubleday, Woodstock, Vt. William Hugh Douglas, Durwoody, Ga. David Freeman Douglass, Center Conway, N.H. Matthew Pierre Dumas, Sharon, Mass. Anneliese Marie Eckhardt, Lincoln, Mass. Osmonnie Mao Erat, Jenkinsown, Pa. Stuart William Eunson, Princeton, Mass. Lesley Jayne Eydenberg, Revere, Mass. Mark Christopher Fallon, Boston, Mass. Timothy Scott Farnham, Hampden, Me. Timothy Kyle Felt, Mill Valley, Calif. Douglas Bruce Fenn, Brattleboro, Vt. Campbell Douglas Field, Providence, R.I. Megan Finley, Washington, D.C. Galen Hunt Fisher, Princeton, N.J. Gretchen Leigh Fisher, Willimantic, Conn. Maureen Fitzgerald, Brunswick, Me. Jennifer Clare Flynn, Dedham, Mass. Julie M. Forbus, Madison, Me. David Bartlett Ford, Winchester, Mass. John Franklin Fort IV, Rye, N.H. Janet E. Fortin, Benion, Me. Michael William Freret, Bethesda, Md. Laura Elizabeth Friedewald, New York, N.Y. Joshua H. Friedman, Larchmont, N.Y. Michele Ann Friel, Metrose, Mass. Kristen Fryling, Scituate, Mass. Ly Thi Furrow, Bangor, Me. Emily Sears Gallagher, Weston, Mass. Cheryl Lynn Gariepy, Attleboro, Mass. H Samantha Garrison, Akron, Ohio Lynne Kathleen Garrity, Topsham, Me. Brian Michael Garvey, Dracut, Mass. John Peterson Gause, Monroe, Me. Susan Marie Gerstberger, Andover, Mass. Matthew Cooper Gibbons, Scituate, Mass. Marc John Gilbertson, Montpelier, Vt. Catherine Williamson Giles, Boston, Mass. Amy Arnold Gillis, Alexandria, Va. Matthew Vincent Gillis, Glastonbury, Conn. Felise Ann Glantz, Dix Hills, N.Y. Sean Alexander Glew, Worcester, Mass. Harriet Duncan Gogolak, Westwood, Mass.

William Louis Goodman, Oakdale, Conn. Lisa Anne Gould, Dedham, Mass. Christine Marie Goulding, Danville, Me. Susanna Elizabeth Gouws, Falmouth, Me. Robert Edward Gramlich, Ann Arbor, Mich. John Jeremy Martin Grant, Loveland, Colo. Duncan Harris Gray, North Kingstown, R.I. Candace Annette Green, Pittsburgh, Pa. Hilary Greene, Hancock, Mass. Matthew Addison Greenlaw, Hingham, Mass. Thomas Francis Griffin, Science, Mass. James Edward Gruener, Conden, Me. Michelle Marie Guertin, Billerica, Mass. Jennifer Lynn Hale, Boothbay Harbor, Me. Heather Lee Hall, Louisville, Ky. Colleen Mary Halleck, Newport, N.H. George Seward Hallenbeck, Burr Ridge, Ill. McCurrah Keller Hamlin, Freeport, Me. Johanna Ducey Hardy, Edina, Minn. Jennifer Kate Hartel, Andover, Mass. Laura Sue Hartrick, Wilton, Conn. Heather Lynn Hartshorn, Lexington, Mass. Jeffrey Stephen Hartwell, Cohasset, Mass. Corinne Kimberley Hauser, Chevy Chase, Md. Amy Lynn Havel, Forestville, Conn. James Taylor Heimbach, Acton, Mass. Elizabeth Sara Helft, Palo Alto, Calif. Laura Sue Henderson, Wethersfield, Conn. Michael Patrick Henry, Warwick, R.I. Kristin Lorraine Herbster, Chadds Ford, Pa. Sarah Newell Hewitt, Holden, Mass. Kendra Beverly Heywood, Attleboro, Mass. Kaylyn Eleece Hipps, San Francisco, Calif. Christine Marie Horst, Golden, Colo. Matthew Alexander Hughes, Tucson, Ariz. Tristram Coffin Hussey, Midlothian, Va. Maryann Elizabeth Hutchinson, Raynham, Mass.

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Erin Cathleen Kelly, Dracut, Mass. Christine Anne Kerrigan, Minot, Mass. Robert Bruce Kiernat, St. Paul, Minn. Stacey Anne King, Winchester, Mass. Joseph Corbin Kiser II, Minnetonka, Minn. Travis Reginald Kline, Claverack, N.Y. Lauren Beth Knebel, Orinda, Calif. Amey Elizabeth Knight, Warwick, R.I. Stacie E. Knight, Yorklyn, Del. Randall Jeffrey Korach, Shaker Heights, Ohio Christianmichael Martin Kristan, Paris, Me. Melissa Hunt LaBarre, Shaker Heights, Ohio Sharon Marie Labick, Scarsdale, N.Y. Kimberly Sharon Labow, Needham, Mass. Margaret Cecilia Lacey, Cleveland Heights, Ohio Magda Lena Lacharité, Lexington, Mass. Jeffrey Martin LaCourse, Toledo, Ohio Christopher Sinclair Lahey, Old Town, Me. James Michael Lamberti, Essex Junction, Vt. Edward Frederick Lambrecht III, Grosse Pointe Farms, Mich. Wendy Anne Langdon, Farmington, Conn. Mark Eugene LaPointe, Lakeville, Mass. Suzanne LaPrade, Madison, Conn. Charles Nelson Leach III, Farmington, Conn. Willis Todd Leadley, Boothbay, Me. Patricia Lee, Akron, Ohio Matthew Daniel Lehman, Upper Arlington, Ohio James Joseph Lewis, Greenwich, Conn. Thomas Loring Lewis, Westport, Conn. Grace Liang, Arcadia, Calif. Christopher Blake Liebert, Madison, Conn. Jennifer Sun Lim, Bar Harbor, Me. R. Thomas Livezey, Philadelphia, Pa. Brent Cunningham Livingston, Lewisberry, Pa. Deborah Elizabeth Lloyd, Farmington, Conn. Ernie Michael Long, Lewiston, Me. Stephen Thomas Loynd, Concord, Mass. Kathleen Elizabeth Lucas, Marlboro, Mass. Sean Michael Lucey, Milton, Mass. Deborah Ann Lutton, Egg Harbor Township, NJ. Charles Field Lyons, Pelham, N.Y. Shelly Ann MacConnell, Springuale, Me. Matthew Faust Mackey, Mendham, N.J. Christine Macone, Walpole, Mass. Debra Ann MacWalter, Duxbury, Mass. Erika Lynn Mailman, Montpelier, Vt. Richard Peter Main, Patten, Me. Jane Margaret Maloney, Shorewood, Wis.

Elizabeth Jane Marsh, Rochester, Minn. Stephen Taylor Marshall, Lake Forest, Ill. Meredith J. Master, Greenwich, Conn. Patricia Ann Masters, East Williston, N.Y. Stephan Maximilian Matschinsky, Wallingford, Pa. Margaret Thorn Mauran, Providence, R.I. Terence R. McAllister, Andover, Mass. Richard Paul McCann, Summit, N.J. Gretchen Marie McCarey, Boxford, Mass. Brynne Meredith McCormick, Columbus, Ohio Christopher Turing McGowan, North Bethesda, Md. Heather Anne McLeman, Winchester, Mass. Michael David McRae, Niagara Falls, Ontario James Mortimer McVay II, Pittsburgh, Pa. Heidi Elizabeth Meehan, Manchester, Mass. Matthew Paul Melander, Boudoinham, Me. Katharine Kilvert Merriman, Providence, R.I. Emily Metzendorf, New York, N.Y. Matthew Jacob Meyer, Sherman Oaks, Calif. Heidi Christiansen Meyers, Mt. Vernon, Ohio Chantal Latrice Miller, Gary, Ind. Emilie Wright Miller, Worcester, Mass. David McGuire Mills, Worcester, Mass. Maryam Rakiya Mims, Arverne, N.Y. Rabia Mirza, Karachi, Pakistan Rebekah Ann Mitchell, Atherton, Calif. David Edson Moore, Rockport, Mass. George Braniff Moore, New Canaan, Conn. Julie L. Moran, Ann Arbor, Mich. Kerry Jane Morgan, Lancaster, Pa. Virginia Frances Morrison, Concord, Mass. Elizabeth Sterling Morse, Concord, Mass. Aaron Wilcox Mosher, Haverhill, Mass. Timothy Patrick Moynihan, Wellesley, Mass. David Daniel Mumford, Duxbury, Mass. Tracy Jean Mungeam, Marlborough, Mass. Christine Marie Murphy, Lancaster, Pa. Jeffrey Allen Nash, West Newton, Mass. Cherlyn Jane Neely, Los Altos, Calif. Pamela Lynn Newsome, Norwell, Mass. Deanne Elise Newton, Macon, Ga. Andrea Lynn Nix, Fairport, N.Y. Kimberly Beth Norberg, Warwick, R.I. Stacey Ann O'Brien, South Weymouth, Mass. Todd Andrew O'Connor, Lynn, Mass. Geoffrey Owen O'Hara, Cranston, R.I. Linnea Elizabeth Oliver, Weston, Mass. Caroline Sawyer O'Malley, Needham, Mass. Kathleen Lucy O'Neill, Hingham, Mass.

Gregory Artis Ore, Philadelphia, Pa. Scott Francis Osborne, Middletown, Md. Diane Louise Osgood, Hanover, Mass. Patricia Ann O'Sullivan, Foxborough, Mass. Lisa Anne Owen Evans, Westport, Conn. Ellyn Paine, Intervale, N.H. Meredith Lee Palin, Boca Raton, Fla. Timothy Atwood Palmer, Yarmouth, Me. Alexander John Paraskos, Dover, Mass. Jessica MacLean Paris, Medina, N.Y. Amy Kyle Parker, Greenwich, Conn. David Andrew Parker, New York, N.Y. Niles Dallmeyer Parker, Wellesley, Mass. Todd Brooks Patriacca, Hopkinton, N.H. Rebecca Rae Pease, Turner, Me. Jessica Rowland Pelon, Holliston, Mass. Steven Kravitz Peltier, Huntingdon Valley, Pa. Beth Wilson Perry, Cohasset, Mass. Michelle Renee Pinnock, Queens, N.Y. Laura Elizabeth Pizzarello, Seekonk, Mass. Glenn Wilbur Poland, Rocky Hill, Conn. Pamela Jean Pomerleau, Topsham, Me. Christine Lee Poolos, Greenville, Pa. Stacy Ann Porath, Augusta, Me. Erik Dodds Potholm, South Harpswell, Me. Rebecca Hammond Pratt, Dover, Mass. Elizabeth Greeley Preston, Old Lyme, Conn. N. Todd Pritsky, Perrysburg, Ohio Andrea Lynne Prochniak, Peabody, Mass. Brian Joseph Quinn, Canton, Mass. Frederic Halden Ramstedt, Pelham, N.Y. Daniel Marcus Raymont, Washington, D.C. Carol Diane Rea, Honolulu, Hawaii Charlotte Edmondson Reece, Winchester, Mass. Monise Rene Reed, Knoxville, Tenn. Patrick Barrington Reed, Potomac, Md. Kristen Margaret Resor, Acton, Mass. Elizabeth Endersbe Reutlinger, North Adams, Mass. Charles B. Riopel, Manchester, N.H. Hilary Gilmour Robbins, Lyme, Conn. Jay Anthony Robinson, Orono, Me. Gina Ann Margaret Rogers, Kennebunk, Me. Melinda Carey Rohman, Waterville, Me. Michael Thomas Rooney, Troy, N.Y. Linda Gisele Rossignol, Auburn, Me. Katherine Louise Roth, Mechanicsburg, Pa. Richard Roy Rusnack II, Winnetka, Ill. Eric Samuel Russman, Glastonbury, Conn. Robert Andrew Salaverry, Scarsdale, N.Y.

Maria Ann Sano, Scituate, R.I. Mahua Sarkar, Calcutta, India Michael Kenneth Schwartz, Andover, Mass. Jennifer Grace Scott, Shorewood, Wis. Danté J.C. Self, Wallingford, Conn. Samuel Phillip Sharnik, Norwalk, Conn. Michael Joseph Shaughnessy, Jr., Troy, N.Y. Amy Daniella Shaw, Wayland, Mass. Barbara Lorraine Shaw, New Fairfield, Conn. Patricia Ann Shepard, Glastonbury, Conn. Andrew Gregg Shpiz, Sudbury, Mass. David Chandler Shumway, Duxbury, Mass. Jacob I. Silberfarb, New York, N.Y. John Albert Singleton, Charleston, W. Va. Sean Michael Skaling, Camden, Me. Carl Anderson Smith, Jr., Atlanta, Ga. Gregory Christian Smith, Dover, Mass. Nancy Ruth Smith, Steep Falls, Me. William Cory Snow, South Portland, Me. Tamar Christine Snyder, Fairfax Station, Va. Gary D. Socquet, East Vassalboro, Me. Jane Elizabeth Solomon, Marblehead, Mass. William Curtis Sprong III, Wellesley, Mass. Richard Louis Starets, Bridgton, Me. Jonathan Bradley Starr, Marblehead, Mass. Donald James Stauffer, Salt Lake City, Utah Scott David Stecher, Beverly, Mass. Jason Michael Stein, Oak Brook, Ill. Frederick James Stewart, Portland, Oreg. Geoffrey Cope Stewart, Washington, D.C. Hayden Glenn Stewart, Weston, Conn. Dana Stirling Stinson, Baltimore, Md. Walter Henry Stowell III, Sudbury, Mass. Samantha Jones Strawbridge, Washington, Conn

Rebecca Robards Streett, Clayton, Mo. James Edward Stuart, Coventry, Conn. Caitlin Lee Sullivan, Manchester, Mass. Theresa Louise Sullivan, Dracut, Mass. Sandra Anne Sundwall, Tariffville, Conn. Kimberly Ann Swon, Brookside, N.J. Tara Aimee Taupier, Lowell, Mass. Daniel Constantine Teguis, Dudley, Mass. Matthew Neil Testa, Great Neck, N.Y. Robin Michelle Thibeault, Concord, Mass. Stacey Louise Thoits, Freeport, Me. Keith Stacy Thomajan, Brookline, Mass. Christina Gwenn Thompson, Cranston, R.I. Kent Arnold Thompson, Gilford, N.H. Ronald Brien Thompson, Bethlehem, Pa. Glenn Alton Thurlow, Lincoln, Me.

Nicholas Tolimieri, Winona, Minn. Goro Toshima, San Marino, Calif. Christine Marie Tuccille, Cos Cob, Conn. Lisa Honor Twomey, Swansea, Mass. David Lee Unruh, Old Town, Me. Todd Andrew Urguhart, Seekonk, Mass. Adolfo K. Vaal Neto, Luanda, Angola Bonnie Carol Van Der Sluys, Trumbull, Conn. Juliette Nicole Varga, Newton, Mass. David Andrew Vincent, Wilmette, Ill. Stephanie Estelle Vore, Amherst, N.H. Clint Byron Walker, Poland, Me. Julie Payne Walker, Hopkinton, Mass. Portia Sterling Walker, Ellsworth, Me. Amy Elizabeth Walter, Barrington, Ill. Pamela Beth Washington, Washington, D.C. Kimberly Ann Webber, Foxboro, Mass. Clark David Weber, Barrington, Ill. Sara Kristin Webster, Bolton, Mass. Peter Oxman Weinberg, Fairfax, Va. Robert David Weiner, Framingham, Mass. Rachel Weinstein, Colorado Springs, Colo. Donna Freeman Wentworth, Fryeburg, Me. Seth Lincoln Wheeler, West Boxford, Mass. Sally Elizabeth White, Wayland, Mass. Sharyl Alayne White, Sturbridge, Mass. Kurt E. Whited, Moreland Hills, Ohio Kevin Martin Whitmore, Waterville, Me. Stephen Millen Whitworth, Orono, Me. Kristen Jeanne Widronak, Peabody, Mass. Kary Ann Wilkins, Livermore Falls, Me. Bradford Wayne Willard, Madison, Conn. Brent David Willey, Santa Barbara, Calif. Andrew Fox Williams, Bethesda, Md. Clint Matthew Williams, Pittsfield, Me. Susan Margaret Willis, Williamsburg, Va. Rebecca Chloe Winokur, Portsmouth, N.H. Steven William Witherell, Paris, France Audrey Claire Wittemann, Glastonbury, Conn. Joshua Philip Wolman, West Newton, Mass. Jennifer Knowles Wood, Seekonk, Mass. Kristen Ann Woods, Wenham, Mass. Lori Elizabeth Wright, Atlanta, Ga. Alexandra Wyle, Los Angeles, Calif. Christopher Drake Wyman, Augusta, Me. Pamela Janette Young, Braintree, Mass. Alan Greg Yuodsnukis, Brunswick, Me. Geoffrey Craig Zentz, Concord, Mass. Karl Gilbert Ziegenfus, Allentown, Pa. Constantinos George Zioze, Manchester, N.H.

## 222 DEGREES AWARDED AT COMMENCEMENT

Degrees Granted in October As of the Class of 1990 Karen Marie Boomer, Hingham, Mass. Thomas Francis Kennedy, Andover, Mass. Peter Edward McElroy, Needham, Mass. Jason Robert Shulman, New York, N.Y. Eleanor Siobhan Sterling, Wellesley, Mass. Jeffrey Michael Wheeler, Chesterville, Me.

## Honorary Degree Recipients

Ann Beattie Doctor of Letters

H. Ridgely Bullock Doctor of Laws

Victor Almon McKusick Doctor of Science

Constance Baker Motley Doctor of Laws

Margaret Chase Smith Doctor of Laws

Thomas J. Watson, Jr. Doctor of Humane Letters

## Honors

## Senior Marshals

Cherlyn Jane Neely Jessica Rowland Pelon

## Bachelor's Degree with Honors

Summa Cum Laude Robert Andrew Bock Katharine Carroll Button George Seward Hallenbeck Jean Marie Jacob Matthew Faust Mackey Cherlyn Jane Neely Jessica Rowland Pelon Beth Wilson Perry Clint Byron Walker Amy Elizabeth Walter Alan Greg Yuodsnukis Magna Cum Laude Elizabeth Ann Ackroyd Thomas John Brown, Jr. Dean Stanton Burnell Allen Russell Carlson Steven Charles Collier Bradley Andrews Comisar Aditva Daval Kimberley Lynn Derrington Galen Hunt Fisher Michael William Freret Lynne Kathleen Garrity Christine Marie Goulding John Jeremy Martin Grant Tristram Coffin Hussey Magda Lena Lacharité Ernie Michael Long Stephen Thomas Loynd Christine Macone Erika Lynn Mailman **Richard Peter Main** Jane Margaret Maloney Terence R. McAllister Richard Paul McCann Gretchen Marie McCarey Katharine Kilvert Merriman Kathleen Lucy O'Neill Katherine Louise Roth Mahua Sarkar

John Albert Singleton Tamar Christine Snyder Walter Henry Stowell III Ronald Brien Thompson Juliette Nicole Varga David Andrew Vincent Andrew Fox Williams

Cum Laude Eric S. Adams David John Anderson Todd Loren Astor Rebecca Cochran Bancroft Catherine Breen Sarah True Brown Christopher T. Brownsey **leffrey** Scott Bryant Robyn Ellen Bussell Matthew Benjamin Cohen Susan Erica Colavecchio Julia Dolloff Collard Randall Miles Cutler Amy Love Davis Annie De Maria David Mathew Descoteaux Paul Louis Diamond David Andrew Donnelly Lesley Jayne Eydenberg Jennifer Clare Flynn John Peterson Gause Marc John Gilbertson Matthew Vincent Gillis Lisa Anne Gould Susanna Elizabeth Gouws Robert Edward Gramlich Hilary Greene Heather Lee Hall **James Taylor Heimbach** Elizabeth Sara Helft Kaylyn Eleece Hipps Christine Marie Horst Elaine Woodford Jorgensen Kathleen Ann Kaliff Wendy Anne Langdon Elizabeth Jane Marsh Meredith J. Master Stephan Maximilian Matschinsky Heather Anne McLeman Michael David McRae

Heidi Elizabeth Meehan Heidi Christiansen Meyers David McGuire Mills Julie L. Moran Tracy Jean Mungeam Andrea Lynn Nix Kimberly Beth Norberg Linnea Elizabeth Oliver Caroline Sawyer O'Malley Diane Louise Osgood Patricia Ann O'Sullivan Meredith Lee Palin Rebecca Rae Pease Erik Dodds Potholm N. Todd Pritsky Andrea Lynne Prochniak Frederic Halden Ramstedt Kristen Margaret Resor Melinda Carey Rohrman Linda Gisele Rossignol Robert Andrew Salaverry Jennifer Grace Scott Danté J.C. Self Samuel Phillip Sharnik Barbara Lorraine Shaw Gregory Christian Smith Nancy Ruth Smith Jonathan Bradley Starr Hayden Glenn Stewart Matthew Neil Testa Keith Stacy Thomajan Goro Toshima Bonnie Carol Van Der Sluys Peter Oxman Weinberg Robert David Weiner Susan Margaret Willis lennifer Knowles Wood Kristen Ann Woods

Honors in American Studies Barbara Lorraine Shaw

Honors in Chemistry Renée Michele Blanchard

Honors in Economics Robert Edward Gramlich

Honors in English Margaret Cecilia Lacey Heidi Elizabeth Meehan Matthew Neil Testa Donna Freeman Wentworth

Honors in Government Catherine Breen Allen Russell Carlson Michael William Freret James Taylor Heimbach Kathleen Lucy O'Neill Hayden Glenn Stewart

Honors in History Thomas David Dorion

Honors in Philosophy Robert Lee Arendell Stephan Maximilian Matschinsky

Honors in Physics Timothy Andrew Bernard Aditya Dayal Steven Dimitriou

Honors in Psychology George Seward Hallenbeck

## Distinction in the Major

Administrative Science Gretchen Marie McCarey Tracy Jean Mungeam Patricia Ann O'Sullivan

Administrative Science: Quantitative Methods Kimberley Lynn Derrington Jennifer Knowles Wood

African-American Studies (Independent) Michelle Renee Pinnock

American Studies Thomas John Brown, Jr. Julia Dolloff Collard Elizabeth Sara Helft Kathleen Ann Kaliff Stacey Anne King Ellyn Paine Barbara Lorraine Shaw Carl Anderson Smith, Jr. Kurt E. Whited

Anthropology Bradley Andrews Comisar Anthropology (Independent) Tristram Coffin Hussey Richard Peter Main

#### Art

Thomas John Brown, Jr. Bradley Andrews Comisar Laura Elizabeth Pizzarello Stacy Ann Porath Samantha Jones Strawbridge Stephanie Estelle Vore

Art, Studio Concentration Paul Louis Diamond Kerry Jane Morgan Hilary Gilmour Robbins Gregory Christian Smith

#### Biology

Peter Matthew Antall Todd Loren Astor Daniel Patrick Bouvier Lynne Kathleen Garrity Christine Marie Horst Matthew Faust Mackey Julie L. Moran Nicholas Tolimieri Bonnie Carol Van Der Sluys Kimberly Ann Webber

Biology: Environmental Science Concentration David John Anderson Sarah True Brown Timothy Kyle Felt John Franklin Fort IV Terence R. McAllister Geoffrey Cope Stewart Juliette Nicole Varga

Chemistry: A.C.S. Renée Michele Blanchard

Chemistry: Biochemistry Peter Matthew Antall Todd Loren Astor Matthew Nelson Cox Galen Hunt Fisher

Classics Deanna Lynne DeRoche

Classics-English John Jeremy Martin Grant East Asian Studies Stuart William Eunson Magda Lena Lacharité Andrea Lynne Prochniak Ronald Brien Thompson Goro Toshima

Economics Christopher T. Brownsey Steven Charles Collier David Matthew Descoteaux Lesley Jayne Eydenberg Robert Edward Gramlich Colleen Mary Halleck Johanna Ducey Hardy Kaylyn Eleece Hipps Jane Margaret Maloney Katharine Kilvert Merriman David McGuire Mills Jessica Rowland Pelon Tamar Christine Snyder

English Elizabeth Ann Ackroyd Rebecca Cochran Bancreft Christine Marion Bonner Daniel Bowman Julia Dolloff Collard Annie De Maria Jennifer Clare Flynn John Peterson Gause Heather Lee Hall Kristin Lorraine Herbster Margaret Cecilia Lacey Jennifer Sun Lim Stephen Thomas Loynd Erika Lynn Mailman Heather Anne McLeman Heidi Elizabeth Meehan Rebekah Ann Mitchell Kimberly Beth Norberg Rebecca Rae Pease Laura Elizabeth Pizzarello Christine Lee Poolos Elizabeth Endersbe Reutlinger **Jennifer Grace Scott** John Albert Singleton Gary D. Socquet Matthew Neil Testa Keith Stacy Thomajan Christina Gwenn Thompson Lisa Honor Twomev

Donna Freeman Wentworth Susan Margaret Willis Audrey Claire Wittemann

Environmental Studies (Independent) Andrew Fox Williams

French Katharine Carroll Button Ernie Michael Long Stephan Maximilian Matschinsky Katherine Louise Roth

G*erman* Robert Andrew Bock Katharine Carroll Button Christianmichael Martin Kristan

Government Eric S. Adams John Harding Avery Catherine Breen Allen Russell Carlson Matthew Benjamin Cohen Alexander Hamilton Post Colhoun Steven Charles Collier Iulie Erin Daniele David Andrew Donnelly Matthew Pierre Dumas Michael William Freret Matthew Vincent Gillis Lisa Anne Gould James Edward Gruener Amy Lynn Havel James Taylor Heimbach Elaine Woodford Jorgensen Suzanne LaPrade Shelly Ann MacConnell Meredith J. Master Caroline Sawyer O'Malley Kathleen Lucy O'Neill Meredith Lee Palin Erik Dodds Potholm Linda Gisele Rossignol Hayden Glenn Stewart Dana Stirling Stinson Walter Henry Stowell III David Andrew Vincent Amy Elizabeth Walter Lori Elizabeth Wright Constantinos George Zioze

History Dean Stanton Burnell Thomas David Dorion Marc John Gilbertson Christine Marie Goulding Kathleen Ann Kaliff Stephen Thomas Loynd Frederic Halden Ramstedt Katherine Louise Roth Eric Samuel Russman David Lee Unruh David Andrew Vincent

International Studies Laura Sue Henderson Peter Oxman Weinberg

Mathematics Aditya Dayal David Mathew Descoteaux

Performing Arts Jennifer Clare Flynn Deborah Ann Lutton Rebecca Rae Pease Elizabeth Endersbe Reutlinger

Philosophy Robert Lee Arendell Matthew Benjamin Cohen Richard Peter Main Elizabeth Jane Marsh Stephan Maximilian Matschinsky Richard Paul McCann Andrea Lynn Nix N. Todd Pritsky Andrew Fox Williams

Philosophy-Mathematics Susanna Elizabeth Gouws

Physics Timothy Andrew Bernard Aditya Dayal Campbell Douglas Field

Psychology George Seward Hallenbeck Jean Marie Jacob Christine Macone Jessica Rowland Pelon Melinda Carey Rohrman

Religion Alan Greg Yuodsnukis Russian and Soviet Studies Catherine Breen Hilary Greene Clint Byron Walker

Sociology Michele Ann Friel Heidi Christiansen Meyers Beth Wilson Perry Mahua Sarkar

#### Spanish

Robyn Ellen Bussell Kendra Beverly Heywood Robert Bruce Kiernat Cherlyn Jane Neely Lisa Honor Twomey Audrey Claire Wittemann

## Phi Beta Kappa

Elizabeth Ann Ackroyd Robert Andrew Bock Sarah True Brown Thomas John Brown, Jr. Jeffrey Scott Bryant Dean Stanton Burnell Katharine Carroll Button Allen Russell Carlson Steven Charles Collier **Bradley Andrews Comisar** Aditya Dayal Kimberley Lynn Derrington David Mathew Descoteaux Lesley Jayne Eydenberg Galen Hunt Fisher Michael William Freret Lynne Kathleen Garrity Marc John Gilbertson Christine Marie Goulding Susanna Elizabeth Gouws Robert Edward Gramlich John Jeremy Martin Grant George Seward Hallenbeck Christine Marie Horst Tristram Coffin Hussey Jean Marie Jacob Ernie Michael Long Stephen Thomas Loynd Matthew Faust Mackey Christine Macone Erika Lynn Mailman

**Richard Peter Main** Jane Margaret Maloney Terence Redmond McAllister Richard Paul McCann Gretchen Marie McCarey Katharine Kilvert Merriman Cherlyn Jane Neely Kathleen Lucy O'Neill Jessica Rowland Pelon Beth Wilson Perry Linda Gisele Rossignol Katherine Louise Roth Mahua Sarkar John Albert Singleton Tamar Christine Snyder Walter Henry Stowell III Ronald Brien Thompson Bonnie Carol Van Der Sluvs Iuliette Nicole Varga David Andrew Vincent Clint Byron Walker Amy Elizabeth Walter Andrew Fox Williams Alan Greg Yuodsnukis

## Julius Seelye Bixler Scholars

Class of 1991 Robert Andrew Bock, Columbus, Ohio Katharine Carroll Button, Newburgh, N.Y. Steven Charles Collier, East Hardwick, Vt. George Seward Hallenbeck, Burr Ridge, Ill. Jean Marie Jacob, Williamstown, Mass. Matthew Faust Mackey, Mendham, N.J. Richard Peter Main, Patten, Me. Cherlyn Jane Neely, Los Altos, Calif. Jessica Rowland Pelon, Holliston, Mass. Clint Byron Walker, Poland, Me. Alan Greg Yuodsnukis, Brunswick, Me.

### Class of 1992

Chantal Nathalie Begin, Carrabassett Valley, Me. August Bradley Cenname, Columbus, Ohio Jason Oliver Nixon, Tampa, Fla. Alexandria Jennifer Peary, Augusta, Me. Michele Lee Rowell, Montpelier, Vt. Karen Grace Santoro, Marlborough, Conn. Ashley Nichols Weld, Westport, Conn. Hilda Elizabeth Westervelt, Waterville, Me.

Class of 1993 Kris Ann Balser, Worcester, Mass.

## 228 HONORS

Tina Marie Beachy, Mattawan, Mich. Diane Decker, Hillsdale, N.Y. Kristine Anne Demaso, Bucksport, Me. Daniel Benjamin Harris, Newton, Mass. Christopher Paul Iannini, Newtown, Conn. Henry Warren Kelly II, Tijeras, N.M. Jennifer Anne Larsen, Salisbury, Mass. Brittany Elaine Ray, Milbridge, Me. Christopher Norman Sabbey, Needham, Mass. Amy Louise Stickney, Rumford, Me.

## Charles A. Dana Scholars

### Class of 1991

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## Class of 1992

Craig Harvey Appelbaum, Cleveland, Ohio Peter James Carney, Hingham, Mass. Michelle Lee Corrigan, Oakland, Me. Pika Ghosh, Calcutta, India Kathryn Anne Phipps, Malibu, Calif. Margaret Annette Russell, Millinocket, Me. Erika Juall Sayewich, Exeter, N.H.

Class of 1993 Sibel Akbay, Istanbul, Turkey Ari Maurice Dorros, Milwaukee, Wisc. Maria Mikyong Kim, Glendale, Calif. Leif John Merryfield, Salem, N.H. Barrett Leete Smith, Kingston, N.Y. Andrea Lynne Walker, Holden, Mass. Kristin Jane Winkler, Montrose, Colo.

## Senior Scholars

Peter Matthew Antall Molecular Genetic Analysis of the Interaction Between the Bacterial Pathogen Zanthamonas campestris pv. vesicatoria and Tomato Todd Loren Astor The Effects of Treating Females with Exogenous Gonadotropins on the Ultrastructure of Mouse Oocytes and Embryos

Tristram Coffin Hussey Pollen Analysis of the Sepphoris Archaeological Site, Beit Natofa Valley, Lower Galilee, Israel

Magda Lena Lacharité Bringing Japanese Manufacturing Systems to America: The Feasibility of Implementing Just-In-Time Production in the United States

Erika Lynn Mailman Caught Under the Sky, Poems

Susan Margaret Willis Adrienne Rich: The Emergence of a Female Poetic Voice

## Ralph J. Bunche Scholars

Class of 1991 Tyrone Phillip Clerk, Brooklyn, N.Y. Candace Annette Green, Pittsburgh, Pa. Chantal Latrice Miller, Gary, Ind. Maryam Rikaya Mims, Rockaway, N.Y. Gregory Artis Ore, Philadelphia, Pa. Michelle Renee Pinnock, Queens, N.Y. Adolfo K. Vaal Neto, Dorchester, Mass. Pamela Beth Washington, Washington, D.C.

Class of 1992 Lee James Nolan, West Rutland, Vt. Lizzette Vazquez, New York, N.Y. Lance Neal Cabanban, Evanston, Ill. Brooke Danielle Coleman, Beverly, Mass.

## Class of 1993

Paul Schonover Blake, New York, N.Y. Jorge Octavio Cabezas, Bronx, N.Y. Nive Kathleen Filipo, Portland, Oreg. Aliza Naomi Hernandez, Queens Village, N.Y. Ta-Tanisha Demetrius James, New York, N.Y. Sia Aminata Moody, Nashwa, N.H. Roberto Morales, Bronx, N.Y. Karen Susanne Oh, Worthington, Ohio Ruben Aquino Santiago, New York, N.Y.

Class of 1994

Hung Ngoc Bui, Bartlesville, Okla. Karlene Ann Patrice Burrell, Queens Village, N.Y. Cicely Yvonne Finley, Chicago, Ill. Trezlene DeQuette Kearney, Macon, N.C. Ho Wa Leung, New York, N.Y. Ai-Ling M. Logan, Los Angeles, Calif. Marinel Serafin Mateo, Chicago, Ill. Carie Ann Nelson, Buffalo, N.Y. Wanda Maria Rodriguez, Londonderry, N.H. Kebba Tolbert, Bronx, N.Y. Duc Buu Trac, Danvers, Mass. Ana Maria Vaal Da Silva, Dorchester, Mass.

## L. L. Bean Scholars

Class of 1991 Annie DeMaria, Rockport, Me. David Andrew Donnelly, South Harpswell, Me. Shelly Ann MacConnell, Springvale, Me. Clint Byron Walker, Mechanic Falls, Me.

#### Class of 1992

Kristen Anne Corey, Auburn, Me. Matthew Anthony Noyes, Gorham, Me. Farah Lianne Paradise, Jackman, Me. Margaret Annette Russell, Millinocket, Me.

Class of 1993 Stephanie Laurette Doyon, Lisbon Center, Me. Kevin LeRoy Pennell, Whitneyville, Me. Brittany Elaine Ray, Millbridge, Me.

#### Class of 1994

Michelle Lee Severance, Topsfield, Me. Josette Caroline Huntress, Limestone, Me. Daniel Clayton Demeritt, North Bridgton, Me. Danielle Lynn Jamison, Gardiner, Me.

## Index

Absence, 33 Absence from Exams, 43 Academic Counseling, 2 Academic Honesty, 34 Academic Honors, 35 Academic Procedures, 42 Academic Programs, 36 Academic Requirements, 28 Academic Review, 43 Academic Standing, 21, 42 Access Policy, 8 Accreditation, 2, 6 ACS Chemistry Major, 70 Activities, Student, 8 ACT Tests, 13, 14 Administration, 213 Administrative Science, 46 Administrative Science Minor, 47 Admission, 2, 13 Advanced Standing, 14 Application Schedule, 13 Campus Visits, 13 Deposit, 13, 17 Early Admission, 14 Health Certificate, 15 International Students, 15 Interviews, 13 Mid-Year Admission, 14 Nonmatriculated Students, 15 Tests, 14 Transfer Students, 14 Veterans, 14 Adult Education (See "Nonmatriculated Students" and "Special Programs") Advanced Standing, 14 Adviser, Faculty, 16, 42 African-American Studies, 49 African-American Studies Minor, 49 Alcoholic Beverages, Regulations, 22 All-College Distribution Requirements, 28 American Studies, 50 Ancient History, 53 Annual Basic Charges, 17 Anthropology, 54 Anthropology Minor, 55 Application Schedule, 13 Applied Mathematics, 58, 159

Applied Music, 137 Applied Music Associates, 209 Applied Music Fee, 18, 137 Art, 8, 58 Art and Music Center, 8,9 Art Collections and Exhibitions, 8 Art: Studio Art Concentration, 59 Assistants, Departmental, 210 Associated Kyoto Program, 38 Associates in Applied Music, 209 Astronomy, 63 Athletics, 8 Attendance, 34 Attendance Deposits, 17 Audiovisual Center, 11 Auditing Courses, 44 Augmented Credit, 46

Band, 9 Basic Charges, 17 Bean Scholars, 229 Behavior, 22 Bermuda Semester, 99 Bills, 18 Biology, 63 Bixler Scholars, 35, 227 Board Fee, 17, 18 Board of Trustees, 185 Bunche Scholars, 228 Business Administration (See "Administrative Science") Business Matters, 2

Calendar, College, 236, 237 Calendar of Payments, 17 Campus Life, 8 Campus Visits, 13 Career Services, 12 Center for Sustainable Development Studies, 64 Changes of Course, 42 Chaplin Commons, 7 Charges (See "Fees") Chemistry, 69 Chemistry-Biochemistry Major, 70 Chemistry: Environmental Sciences Concentration, 70 Chemistry Minor, 70 Chinese, 73 Chinese Language Studies Away, 38 Chorale, Colby, 9 Class Standing, 42 Classical Civilization Minor, 74 Classics, 73 Classics-English Major, 74 Classics-Philosophy Major, 74 Colby College History, 5 Colby Echo, 10 Colby Host Program, 13 Colby in Caen Fee, 18 Colby in Caen Program, 37 Colby in Cork Fee, 18 Colby in Cork Program, 37 Colby in Cuernavaca Fee, 18 Colby in Cuernavaca Program, 36 Colby in Dijon Fee, 18 Colby in Dijon Program, 36 Colby in London Fee, 18 Colby in London Program, 37 Colby in Lübeck Fee, 18 Colby in Lübeck Program, 36 Colby in Salamanca Fee, 18 Colby in Salamanca Program, 37 Colby in Washington Program, 39 Colby, 2 Colby Plan, 27 Colby Values and the Commons Plan, 7 College Board Tests, 13, 14, 16, 28 Commencement, May 1991, 217 Committees: College, 211 Faculty, 211 Overseers, 191 Commons Plan, 7 Comparative Literature (See "Literature in Translation") Computer Resources, 40 Computer Science, 75 Computer Science Concentration, Mathematics, 130 Computer Science Minor, 75 Concerts, 9, 10 Conduct (See "Behavior") Conflict of Exams, 44 Corporation, College, 185 Courses: Auditing, 44 Changes of, 43

Election of, 42 Key to Numbering, 46 Withdrawal from, 43 Courses of Study, 46 Creative Writing, 76 Creative Writing Minor, English, 76 Credit Requirements, 28 Credits: Augmented, 46 By Examination, 14, 33 Transferred, 33 Critical Dates, 46

Damage to or Loss of College Property, Liability for, 18 Dana Scholars, 35, 228 Dance (See "Performing Arts") Dean's List, 35 Degree Conferred, 5, 35 Degree Requirements, 28 Degrees and Honors, 35 Degrees Awarded, May 1991: Bachelor of Arts, 217 Honorary, 222 Deposits Required, 17 Dishonesty, 34 Dismissal, 22, 43 Distinction in the Major, 35, 224 Distribution Requirements, 28 Division Requirements, 30 Domestic Exchange, 39 Domestic Programs, 39 Drama (See "Performing Arts") Drugs, Regulations, 22

Early Admission, 14 Early Decision, 21 Earth Science Option, Geology Major, 99 East Asian Cultures and Languages, 76 Echo, Colby, 10 Economics, 78 Economics-Mathematics Major, 79 Economics Minor, 79 Education, 83 Education Minor, 83, 84 Election of Courses, 42 Emeriti, Faculty, 193 Emeriti, Trustees, 187 Employment, Student, 2, 21 Engineering, 39, 149 English, 86 English Composition Requirement, 28 Enrollment, 5, 216 Environmental Science, 93 Chemistry: Environmental Sciences Concentration, 70 Concentration, Biology Major, 64 Option, Geology Major, 99 Environmental Studies, 93 Environmental Studies in Costa Rica, 37 Environmental Studies Minor, 93 Exams, 44, 236, 237 Exchange Program Credits, 33 Exchange Programs, 39 Excused Absences, 44 Exemption by Examination, 33 Exhibitions, 8 Extracurricular Activities, 8

Faculty, 5, 193 Faculty Adviser, 16, 42 Faculty, Emeriti, 193 Faculty Representatives, 187 Family Educational Rights and Privacy Act, 23 Fees, Student, 17 Field Experience, 32, 40, 94 Finances (See "Student Fees") Financial Aid, 2, 21 Financial Aid, International Students, 15 Financial Aid, Study Abroad, 38 Fines, 18 First-year Student Orientation, 16 First-year Student Program, 42 Foreign-Language Placement Tests, 14, 16, 28 Foreign-Language Requirement, 28 Foreign-Language Semesters Abroad, 36 Foreign Study Credits, 33 Foreign Study Programs (See "Foriegn-Language Semesters Abroad" and "Junior Year Abroad") French, 94 Freshman Seminar Requirement, 29 Friends of Art, 8

General Fee, 17, 18 General Regulations, 22, 23 Geographical Distribution of Students, 216 Geology, 98 Geology-Biology Major, 99 Geology-Chemistry Major, 99 Geology: Earth Science Option, 99 Geology: Environmental Science Option, 99 Geology Minor, 99 German, 102 German Minor, 103 Glee Club (See "Chorale") Government, 106 Grades (See "Marks") Graduate Schools, Preparation for, 12 Graduation Requirements, 28 Grants and Loans, 2, 21 Greek, 115

Health and Medical Care, 2, 18, 22 Health Certificate for Admission, 14 Health Policy, 22 History, 116 History, Ancient, 53 History of Colby College, 5 Honorary Degree Recipients, 222 Honors: Bachelor's Degree with Honors, 35, 223 Hour Exams, 44 Housing, 7, 18, 23

Incomplete Work, 43 Independent Majors, 32 Independent Study, 32 Inquiries, 2 Intercollegiate Athletics, 8 Interdisciplinary Studies, 36 International Students, 15, 29 International Studies, 123 Internships, 12, 32, 40, 94 Interviews for Admission, 13 Intramurals/I-PLAY, 9 Italian, 125

January Program, 28, 32, 125 January Program Fee, 18 Japanese, 126 Japanese Minor, 126 Jobs, Student (See "Employment") Johnson Commons, 7 Judicial Board, 22 Junior Year Abroad, 37, 38

Language Placement, 14, 16, 28 Language Requirement, 28 Late Payment Fee, 19 Late Registration, 42 Latin, 127 Leave of Absence, 45 Lectures, 9 Legal Studies, 128 Library, 11 Liquor, Regulations, 22 Literary Collections, 11 Literature in Translation, 128 Loan and Payment Plans, 19 Loans and Grants, 2, 21 Lovejoy Commons, 7

Major, 30, 31 Major/Minor Limits, 32 Major, Requirements for (See subject, e.g., "Economics," "Geology," etc.) Majors Offered, 31 Majors, Options within, 31 Marks, 43 Marshals, 210, 223 Mary Low Commons, 7 Mathematics, 129 Mathematics: Computer Science Concentration. 130 Mathematics Minor, 130 Mathematics Placement, 16 Medical Care, 2, 22 Memberships, 6 Minors, 31 Miscellaneous Charges, 18 Museum of Art, 8 Music, 9, 18, 133 Musical Activities, 9

Natural Science, 138 Nondiscrimination Policy, 2, 22 Nonmatriculated Students, 15, 44

Officers of the College, 185

Oracle, 10 Orchestra, 9 Organizations, Student, 10 Orientation for First-year Students, 16 Overseers of the College, 189 Overseers Visiting Committees, 191

Parent Loan Programs, 19, 21 Payment of Bills and Fees, 17, 18, 19, 42 Performing Arts, 9, 138 Performing Arts Minor, 139 Phi Beta Kappa, 35, 227 Philosophy, 143 Philosophy-Mathematics Major, 143 Philosophy-Religious Studies Major, 143, 160 Physical Education, 148 Physical Education Requirement, 29 Physics, 148 Physics Minor, 149 Placement in Foreign Languages, 14, 16, 28 Placement in Mathematics, 16 Point Scale in the Major, 30 Points, Quality, 28 Points, Quantity, 28 Portuguese, 152 Presidents of Colby College, 5 Probation, 43 Professional Schools, Preparation for, 12, 40 Psychology, 152 Psychology Minor, 153 Public Affairs, 2 Public Policy, 158 Public Policy Minor, 158 Public Policy Minor, Chemistry, 70

Quality Requirements, 28 Quantitative Analysis/Applied Mathematics, 159 Quantitative Analysis/Applied Mathematics Minor, 159 Quantity Requirements, 28 Quizzes, 44

Radio Colby, 10 Readmission, 33 Records, Student, 2, 23 Refunds, 19 Registration, 42 Regulations, General, 22 **Religious Activities**, 10 Religious Studies, 160 Repeated Courses, 34 Requirements for Graduation (See "Academic Requirements") Research Associates, 210 Residence Halls, 7, 23 Residence Halls Damage Fines, 18 Residence Requirements, 28 Residential Commons, 7, 23 Returning Students, Requirement for, 33 Romance Languages and Literature, 166 Room Fee, 17, 18 Room Reservations, 18, 23 ROTC, 21, 40 Russian, 167 Russian and Soviet Studies, 168 Russian Language and Literature Minor, 167

Satisfactory/Unsatisfactory, 44 Scholastic Aptitude Test, 14, 15 Science-Technology Studies, 169 Science-Technology Studies Minor, 170 Sea Semester, 39 Secondary School Teacher Certificate, 84 Selected Topics, 172 Semester Exams, 44 Senior Marshal, 223 Senior Scholars, 35, 36, 228 Social Rules, 22 Social Science, 172 Sociology, 172 Sociology Minor, 173 Spanish, 177 Special Programs, 2, 41 Standing, Academic, 42 Standing, Advanced, 14 Statements of Accounts, 19 Student Affairs, 2 Student Association, 10 Student Employment, 2, 21 Student Exchange, 39 Student Fees, 17 Saudene Handbook, 22, 23 Student Living, 23 Student Organizations, 10 Student Records, 2, 23, 43

Student Representatives, 187 Student Teaching, 83 Student's Program, 42 Student's Responsibility in Meeting Requirements, 22, 34 Studio Art Concentration, Art, 59 Study in Africa, 39 Study in Asia, 38 Study in Canada, 38 Study in Latin America, 39 Study in the British Isles, 39 Study in the USSR, 37 Study on the Continent of Europe, Summer Programs (See "Special Programs") Summer School Credits, 33 Suspension, 33

Teacher Certification, 84 Teaching Associates, 210 Tests, 14 Transcripts, 2, 45 Transfer Student Requirements, 14, 29, 33 Transferred Credits, 33 Trustees Emeriti of the College, 187 Tuition Fee, 17 Tuition Payment Plans, 19

Vacations, 236, 237 Veterans, 14

Warnings, 45
Washington Semester Programs, 39
Williams College-Mystic Seaport Program in Maritime Studies, 39
Withdrawal from the College, 45
Withdrawal from Course, 43
WMHB-FM, 10
Women's Studies, 180
Women's Studies Minor, 180

# College Calendar 1991-92

## **First Semester**

Saturday, August 31 Sunday, September 1, through Wednesday, September 4 Sunday, September 8 Monday, September 9 Friday, September 27, through Sunday, September 29 Monday and Tuesday, October 14, 15 Friday, November 1, through Sunday, November 3 Wednesday, November 27, through Sunday, December 1 Thursday, December 12 Friday, December 13 Monday, December 16, through Saturday, December 21 Sunday, December 22

January Term Saturday, January 4 Monday, January 6, through Thursday, January 30

## Second Semester

Tuesday, February 4 Wednesday, February 5 Saturday, March 21, through Sunday, March 29 Friday, May 8 Saturday, May 9 Wednesday, May 13, through Monday, May 18 Tuesday, May 19 Saturday, May 23 Sunday, May 24 Orientation program begins COOT trips

Registration First classes Homecoming

Fall break (no classes) Fall Parents Weekend

Thanksgiving recess

Last classes of first semester Last day for scheduled events Semester examinations

Make-up examinations (residence halls closed for winter recess)

Orientation January program

Registration First classes Spring recess (residence halls closed)

Last classes of second semester Last day for scheduled events Semester examinations

Make-up examinations Baccalaureate Commencement

# College Calendar 1992-93

## **First Semester**

Monday, August 31 Tuesday, September 8 Wednesday, September 9 Monday and Tuesday, October 19, 20 Wednesday, November 25, through Sunday, November 29 Friday, December 11 Saturday, December 12 Wednesday, December 16, through Monday, December 21 Tuesday, December 22

January Term Saturday, January 2 Monday, January 4, through Thursday, January 28

## Second Semester

Tuesday, February 2 Wednesday, February 3 Saturday, March 20, through Sunday, March 28 Friday, May 7 Saturday, May 7 Saturday, May 8 Wednesday, May 12, through Monday, May 17 Tuesday, May 18 Saturday, May 22

Sunday, May 23

Orientation program begins Registration First classes Fall break (no classes) Thanksgiving recess

Last classes of first semester Last day for scheduled events Semester examinations

Make-up examinations (residence halls closed for winter recess)

Orientation January program

Registration First classes Spring recess (residence halls closed)

Last classes of second semester Last day for scheduled events Semester examinations

Make-up examinations Baccalaureate

Commencement

The College reserves the right in its sole judgment to make changes of any nature in its program, calendar, or academic schedule whenever it is deemed necessary or desirable, including changes in course content, the rescheduling of classes with or without extending the usual academic term, cancellation of scheduled classes and other academic activities, and requiring or affording alternatives for scheduled classes or other academic activities, in any such case giving such notice thereof as is reasonably practicable under the circumstances.

## NOTES

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