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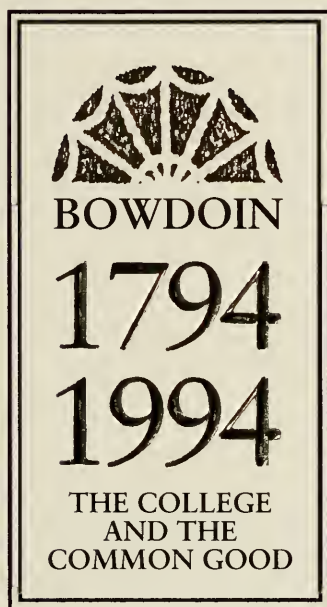
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BOWDOIN COLLEGE

CATALOGUE FOR 1993-1994



BRUNSWICK, MAINE

AUGUST 1993



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BOWDOIN
COLLEGE

CATALOGUE FOR 1993-1994

BRUNSWICK, MAINE

AUGUST 1993

In its employment and admissions practices, Bowdoin is in conformity with all applicable federal and state statutes and regulations. It does not discriminate on the basis of age, race, color, sex, sexual orientation, marital status, religion, creed, ancestry, national and ethnic origin, or physical or mental handicap.

The information in this catalogue was accurate at the time of publication. However, the College is a dynamic community and must reserve the right to make changes in its course offerings, degree requirements, regulations, procedures, and charges.

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

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College Calendar

1993

August 29, Sunday
August 29–31, Sun.-Tues.
September 1, Wednesday

September 2, Thursday
September 16–17, Thurs.-Fri.
September 22, Wednesday
September 25, Saturday
October 8, Friday
October 13, Wednesday
October 14–17, Thurs.-Sun.
 October 14–15, Thurs.-Fri.

 October 14–16, Thurs.-Sat.
 October 16, Saturday

October 29, Friday
October 29–30, Fri.-Sat.
November 3–5, Wed.-Fri.
November 24, Wednesday
November 29, Monday
December 8, Wednesday
December 9–13, Thurs.-Mon.
December 14–21, Tues.-Tues.

1994

January 22, Saturday
January 24, Monday
February 11–12, Fri.-Sat.

February 12, Saturday
February 14–17, Mon.-Thurs.
March 3–5, Thurs.-Sat.
March 18, Friday
March 27–April 3, Sun.-Sun.
April 3, Sunday
April 4, Monday
April 6–9, Wed.-Sat.
May 6–7, Fri.-Sat.
May 10, Tuesday

192nd Academic Year

Rooms ready for occupancy.
Orientation.
Registration.
Opening of College Convocation.
Fall semester classes begin, 8:00 A.M.
Rosh Hashanah.
James Bowdoin III Birthday Celebration.
Yom Kippur.
Fall vacation begins after last class.
Fall vacation ends, 8:00 A.M.
Inauguration of Bowdoin Bicentennial.
Alumni Council, Alumni Fund, and
Planned Giving meetings.
Meetings of the Governing Boards.
Homecoming Day and the Bowdoin
Festival.
James Bowdoin Day.
Parents' Weekend.
Bicentennial History Institute.
Thanksgiving vacation begins after last class.
Thanksgiving vacation ends, 8:00 A.M.
Last day of classes.
Reading period.
Fall semester examinations.

Rooms ready for occupancy.
Spring semester classes begin, 8:00 A.M.
Winter's Weekend. Alumni Council, Alumni
Fund, and Planned Giving meetings.
Bicentennial Music Marathon.
Bicentennial Fine Arts Institute.
Meetings of the Governing Boards.
Spring vacation begins after last class.
Passover.
Easter.
Spring vacation ends, 8:00 A.M.
Bicentennial Environmental Institute.
Ivies Weekend.
Last day of classes.

May 11–14, Wed.-Sat.	Reading period.
May 15–21, Sun.-Sat.	Spring semester examinations.
May 26–27, Thurs.-Fri.	Meetings of the Governing Boards.
May 28, Saturday	The 189th Commencement Exercises.
June 2–5, Thurs.-Sun.	Reunion Weekend. Bicentennial Finale.
June 24, Friday	Charter Day, Boston.
1994	193rd Academic Year (Tentative schedule)
August 28, Sunday	Rooms ready for occupancy.
August 28–30, Sun.-Tues.	Orientation.
August 31, Wednesday	Registration.
	Opening of College Convocation.
September 1, Thursday	Fall semester classes begin, 8:00 A.M.
September 6–7, Tues.-Wed.	Rosh Hashanah.
September 15, Thursday	Yom Kippur.
September 30, Friday	James Bowdoin Day.
Sept. 30–Oct. 1, Fri.-Sat.	Parents' Weekend.
October 7–8, Fri.-Sat.	Alumni Council and Alumni Fund meetings.
October 14, Friday	Fall vacation begins after last class.
October 19, Wednesday	Fall vacation ends, 8:00 A.M.
October 20–22, Thurs.-Sat.	Meetings of the Governing Boards.
October 22, Saturday	Homecoming.
November 23, Wednesday	Thanksgiving vacation begins after last class.
November 28, Monday	Thanksgiving vacation ends, 8:00 A.M.
December 7, Wednesday	Last day of classes.
December 8–12, Thurs.-Mon.	Reading period.
December 13–20, Tues.-Tues.	Fall semester examinations.
1995	
January 21, Saturday	Rooms ready for occupancy.
January 23, Monday	Spring semester classes begin, 8:00 A.M.
February 3–4, Fri.-Sat.	Winter's Weekend. Alumni Council, Alumni Fund, and Planned Giving meetings.
	Meetings of the Governing Boards.
March 2–4, Thurs.-Sat.	Spring vacation begins after last class.
March 17, Friday	Spring vacation ends, 8:00 A.M.
April 3, Monday	Passover.
April 15–22, Sat.-Sat.	Easter.
April 16, Sunday	Ivies Weekend.
May 5–6, Fri.-Sat.	Last day of classes.
May 9, Tuesday	Reading period.
May 10–13, Wed.-Sat.	Spring semester examinations.
May 14–20, Sun.-Sat.	Meetings of the Governing Boards.
May 25–26, Thurs.-Fri.	The 190th Commencement Exercises.
May 27, Saturday	Reunion Weekend.
June 1–4, Thurs.-Sun.	

1995

August 27, Sunday
 August 27–29, Sun.-Tues.
 August 30, Wednesday

August 31, Thursday
 September 22–23, Fri.-Sat.

September 25–26, Mon.-Tues.

October 4, Wednesday

October 6, Friday

October 11, Wednesday

October 12–14, Thurs.-Sat.

October 14, Saturday

October 27, Friday

October 27–28, Fri.-Sat.

November 22, Wednesday

November 27, Monday

December 6, Wednesday

December 7–11, Thurs.-Mon.

December 12–19, Tues.-Tues.

1996

January 20, Saturday

January 22, Monday

February 9–10, Fri.-Sat.

March 7–9, Thurs.-Sat.

March 15, Friday

April 1, Monday

April 4–11, Thurs.-Thurs.

April 7, Sunday

May 3–4, Fri.-Sat.

May 7, Tuesday

May 8–11, Wed.-Sat.

May 12–18, Sun.-Sat.

May 23–24, Thurs.-Fri.

May 25, Saturday

May 30–June 2, Thurs.-Sun.

194th Academic Year (Tentative schedule)

Rooms ready for occupancy.

Orientation.

Registration.

Opening of College Convocation.

Fall semester classes begin, 8:00 A.M.

Alumni Council, Alumni Fund, and

Planned Giving meetings.

Rosh Hashanah.

Yom Kippur.

Fall vacation begins after last class.

Fall vacation ends, 8:00 A.M.

Meetings of the Governing Boards.

Homecoming.

James Bowdoin Day.

Parents' Weekend.

Thanksgiving vacation begins after last class.

Thanksgiving vacation ends, 8:00 A.M.

Last day of classes.

Reading period.

Fall semester examinations.

Rooms ready for occupancy.

Spring semester classes begin, 8:00 A.M.

Winter's Weekend. Alumni Council, Alumni

Fund, and Planned Giving meetings.

Meetings of the Governing Boards.

Spring vacation begins after last class.

Spring vacation ends, 8:00 A.M.

Passover.

Easter.

Ivies Weekend.

Last day of classes.

Reading period.

Spring semester examinations.

Meetings of the Governing Boards.

The 191st Commencement Exercises.

Reunion Weekend.

1993

SEPTEMBER

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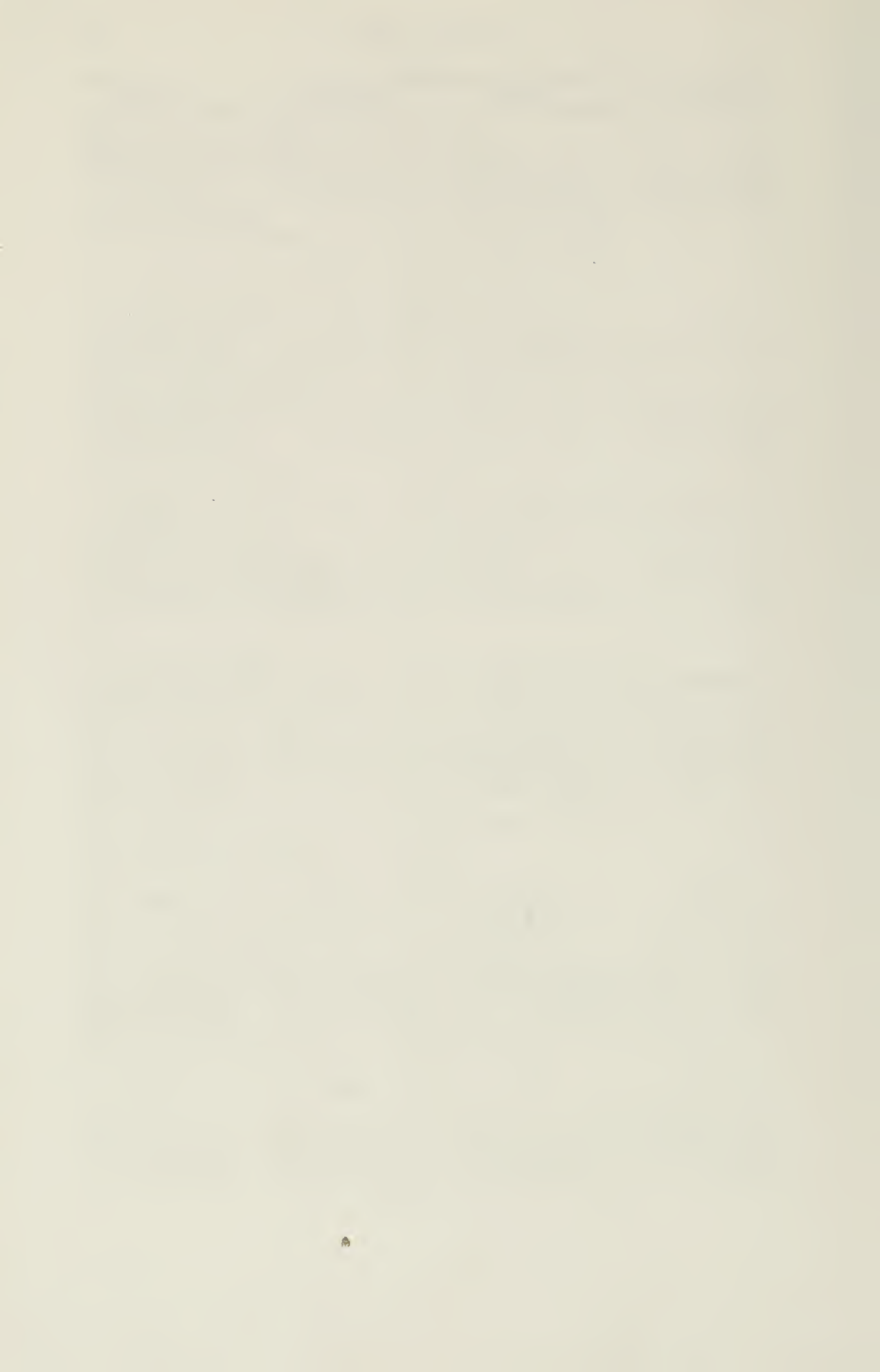
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The Purpose of the College

BOWDOIN COLLEGE BELIEVES strongly that there is an intrinsic value in a liberal arts education, for the individual student, for the College as an institution, and for society as a whole. Historically, the arrangement of courses and instruction that combine to produce liberal arts education has changed and undoubtedly will continue to change, but certain fundamental and underlying goals remain constant.

It is difficult to define these goals without merely repeating old verities, but certain points are critical. The thrust of a liberal arts education is not the acquisition of a narrow, technical expertise; it is not a process of coating young people with a thin veneer of “civilization.” That is not to say that liberal arts education in any way devalues specific knowledge or the acquisition of fundamental skills. On the contrary, an important aspect of a sound liberal arts education is the development of the power to read with critical perception, to think coherently, to write effectively, to speak with force and clarity, and to act as a constructive member of society. But liberal arts education seeks to move beyond the acquisition of specific knowledge and skills toward the acquisition of an understanding of humankind, nature, and the interaction of the two, and toward the development of a characteristic style of thought that is informed, questioning, and marked by the possession of intellectual courage. When defined in terms of its intended product, the purpose of the College is to train professionally competent people of critical and innovative mind who can grapple with the technical complexities of our age and whose flexibility and concern for humanity are such that they offer us a hope of surmounting the increasing depersonalization and dehumanization of our world. The College does not seek to transmit a specific set of values; rather, it recognizes a formidable responsibility to teach students what values are and to encourage them to develop their own.

Liberal arts education is, in one sense, general, because it is concerned with many different areas of human behavior and endeavor, many civilizations of the world, many different aspects of the human environment. It seeks to encourage the formation of habits of curiosity, rigorous observation, tolerant understanding, and considered judgment, while at the same time fostering the development of varied modes of communicative and artistic expression. This concern for breadth and for the appreciation of varying modes of perception is combined with a commitment to study some particular field of learning in sufficient depth to ensure relative mastery of its content and methods. In short, a liberal arts education aims at fostering the development of modes of learning, analysis, judgment, and expression that are essential both to subsequent professional training and to the ongoing process of self-education by which one refines one’s capacity to function autonomously as an intellectual and moral being.

To achieve these goals, the faculty of the College must strive constantly to live up to their commitment in their course offerings, as must students in their course selections. The commitment is a collective one on the part of the College community. Each of the academic components of the College is under a heavy obligation to make its field of study accessible in some manner to the entire student body and to satisfy the needs of the nonmajor as well as those of the specialist.

The College is not and should not be insulated from the problems of the world. Rather, the College is a collection of people deeply involved in their community, their nation, and their world. When liberal arts education is faithful to its mission, it encourages and trains young people who are sensitive to the crucial problems of our time and who have the kind of mind and the kind of inspiration to address them fearlessly and directly. This is its goal and the standard by which it should be judged.

*A statement prepared by the Faculty-Student Committee
on Curriculum and Educational Policy, 1976.*

Historical Sketch

THE IDEA OF BOWDOIN COLLEGE originated in the years following the American Revolution among a group of men who wished to see established in the District of Maine the sort of civil institution which would guarantee republican virtue and social stability. In the biblical language of the day, they wished “to make the desert bloom.”

After six years of arguments over the site, a college was chartered on June 24, 1794, by the General Court in Boston, for Maine was until 1820 a part of the Commonwealth of Massachusetts. The college was to be built in the small town of Brunswick, as the result of a geographic compromise between strong Portland interests and legislators from the Kennebec Valley and points farther east. It was named for Governor James Bowdoin II, an amateur scientist and hero of the Revolution, well remembered for his role in putting down Shays’ Rebellion. Established by Huguenot merchants, the Bowdoin family fortune was based not only on banking and shipping but on extensive landholdings in Maine. The new college was endowed by the late governor’s son, James Bowdoin III, who was a diplomat, agriculturalist, and art collector, and by the Commonwealth, which supported higher education with grants of land and money, a practice established in the seventeenth century for Harvard and repeated in 1793 for Williams College. Bowdoin’s bicameral Governing Boards were based on the Harvard model.

Original funding for the College was to come from the sale of tracts of undeveloped lands donated for the purpose by townships and the Commonwealth. Sale of the wilderness lands took longer than expected, however, and Bowdoin College did not open until September 2, 1802. Its first building, Massachusetts Hall, stood on a slight hill overlooking the town. To the south were the road to the landing at Maquoit Bay and blueberry fields stretching toward the Harpswells. To the north was the “Twelve-Rod Road” (Maine Street) leading to the lumber mills and shipyards near the falls of the Androscoggin. To the east the campus was sheltered by a grove of “whispering” white pines, which were to become a symbol of the College. The inauguration of the first president, the Reverend Joseph McKeen, took place in a clearing in that grove. McKeen, a liberal Congregationalist and staunch Federalist, reminded the “friends of piety and learning” in the District that “literary institutions are founded and endowed for the common good, and not the private advantage of those who resort to them for education.” The next day, classes began with eight students in attendance.

For the first half of the nineteenth century, the Bowdoin curriculum was essentially an eighteenth-century one: a great deal of Latin, Greek, mathematics, rhetoric, Scottish Common Sense moral philosophy, and Baconian science, modestly liberalized by the addition of modern languages, English

literature, international law, and a little history. Its teaching methods were similarly traditional: the daily recitation and the scientific demonstration. The antebellum College also had several unusual strengths. Thanks to bequests by James Bowdoin III, the College had one of the best libraries in New England and probably the first public collection of old master paintings and drawings in the nation. There was a lively undergraduate culture centering on the two literary-debating societies, the Peucinian (whose name comes from the Greek word for “pine”) and the Athenaeum, both of which had excellent circulating libraries. And there were memorable teachers, notably the internationally known mineralogist Parker Cleaveland, the psychologist (or “mental philosopher,” in the language of his day) Thomas Upham, and the young linguist and translator Henry Wadsworth Longfellow (1825).

Finances were a problem, however, especially following the crash of 1837. The College also became involved in various political and religious controversies buffeting the state. Identified with the anti-separationist party, the College faced a hostile Democratic legislature after statehood in 1820 and for financial reasons had to agree to more public control of its governance. For the most part Congregationalists, the College authorities found themselves attacked by liberal Unitarians on the one side and by evangelical “dissenters” on the other (notably by the Baptists, the largest denomination in the new state). The question of whether Bowdoin was public or private was finally settled in 1833 by Justice Joseph Story in *Allen v. McKeen*, which applied the Dartmouth College case to declare Bowdoin a private corporation beyond the reach of the Legislature. The more difficult matter of religion was settled by the “Declaration” of 1846, which stopped short of officially adopting a denominational tie but promised that Bowdoin would remain Congregational for all practical purposes. One immediate result was a flood of donations, which allowed completion of Richard Upjohn’s Romanesque Revival chapel, a landmark in American ecclesiastical architecture. An ambitious new medical school had been established at Bowdoin by the state in 1820 — and was to supply Maine with country doctors until it closed in 1921 — but plans in the 1850s to add a law school never found sufficient backing, and Bowdoin failed to evolve into the small university that many of its supporters had envisioned.

For a college that never had an antebellum class of more than sixty graduates, Bowdoin produced a notable roster of pre-Civil War alumni. The most enduring fame seems that of Nathaniel Hawthorne (1825), who set his first novel, *Fanshawe*, at a college very like Bowdoin. Even better known in his day was his classmate Longfellow, who after Tennyson was the most beloved poet in the English-speaking world and whose “*Morituri Salutamus*,” written for his fiftieth reunion in 1875, is perhaps the finest tribute any poet ever paid to his alma mater. Other writers of note included the satirist Seba Smith (1818), whose “Jack Downing” sketches more or less invented a genre, and Jacob Abbott (1820), author of the many “Rollo” books. But it

was in public affairs that Bowdoin graduates took the most laurels: among them, Franklin Pierce (1824), fourteenth president of the United States; William Pitt Fessenden (1823), abolitionist, U.S. senator, cabinet member, and courageous opponent of Andrew Johnson's impeachment; John A. Andrew (1837), Civil War governor of Massachusetts; Oliver Otis Howard (1850), Civil War general, educator, and head of the Freedmen's Bureau; Melville Fuller (1853), chief justice of the U.S. Supreme Court; and Thomas Brackett Reed (1860), the most powerful Speaker in the history of the U.S. House of Representatives. John Brown Russwurm (1826), editor and African colonizationist, was Bowdoin's first African-American graduate and the third African-American to graduate from any U.S. college.

The old quip that "the Civil War began and ended in Brunswick, Maine," has some truth to it. While living here in 1850–51, when Calvin Stowe (1824) was teaching theology, Harriet Beecher Stowe wrote *Uncle Tom's Cabin*, some of it in her husband's study in Appleton Hall. Joshua L. Chamberlain (1852), having left his Bowdoin teaching post in 1862 to lead the 20th Maine, was chosen to receive the Confederate surrender at Appomattox three years later.

The postwar period was a troubled one for Bowdoin. The Maine economy had begun a century-long slump, making it difficult to raise funds or attract students. The new, practical curriculum and lower cost of the University of Maine threatened to undermine Bowdoin admissions. As president, Chamberlain tried to innovate — a short-lived engineering school, a student militia to provide physical training, less classical language and more science, even a hint of coeducation — but the forces of inertia on the Boards were too great, and a student "rebellion" against the military drill in 1874 suggested that it would take more than even a Civil War hero to change the College.

But change did arrive in 1885, in the form of William DeWitt Hyde, a brisk young man who preached an idealistic philosophy, a sort of muscular Christianity, and who had a Teddy Roosevelt-like enthusiasm for life. By the College's centennial in 1894, Hyde had rejuvenated the faculty, turned the "yard" into a quad (notably by the addition of McKim, Mead & White's Walker Art Building, perhaps the best piece of public architecture in Maine), and discovered how to persuade alumni to give money. Where Bowdoin had once prepared young men for the public forum, Hyde's college taught them what they needed to succeed in the new world of the business corporation. Much of this socialization took place in well-appointed fraternity houses; Bowdoin had had "secret societies" as far back as the 1840s, but it was not until the 1890s that they took over much of the responsibility for the residential life of the College. In the world of large research universities, Hyde — a prolific writer in national journals — proved that there was still a place for the small, pastoral New England college.

Kenneth C. M. Sills, casting himself as the caretaker of Hyde's vision, shepherded the College through two World Wars and the Great Depression.

Among his major accomplishments were bringing the athletic program into the fold of the College and out of the direct control of alumni, gradually making Bowdoin more of a national institution, and cementing the fierce loyalty of a generation of graduates. His successor, James S. Coles, played the role of modernizer: new life was given the sciences, professional standards for faculty were redefined, and the innovative “Senior Center” program was put in operation in the new high-rise dorm later named Coles Tower.

By the late 1960s, Bowdoin was a conservative, all-male college of about 950 students, in which an able youth could get a solid grounding in the liberal arts and sciences from an excellent faculty. The turmoil of the Vietnam era reached Brunswick with the student strike of 1970, however, and even the fraternity system began to be questioned. A more long-lasting change occurred in 1971 with the arrival of coeducation and an eventual increase in size to 1,400 students. In the 1980s, under the leadership of President A. LeRoy Greason, the College undertook to reform the curriculum, expand the arts program, encourage environmental study, attract more minority students and faculty, and make the College fully coeducational.

By 1990, the College was nationally regarded as a small and highly selective liberal arts college, whose chief drawing points included a strong teaching faculty willing to give close personal attention to undergraduates and an enviable location in coastal Maine. The College continued to prove that it could innovate — for example, through pace-setting programs to use computers to teach classics and calculus, through access to live foreign television to teach languages, through student-constructed independent study projects and “years abroad,” and through the microscale organic chemistry curriculum.

President Robert H. Edwards came to Bowdoin in 1990. In his first years, he reorganized the College administration, strengthened budgetary planning and controls, and developed processes for the discussion and resolution of key issues. In 1993–94, the College will celebrate the 200th anniversary of its founding with a year-long series of academic and social events.

PRESIDENTS OF BOWDOIN COLLEGE

Joseph McKeen	1802–1807
Jesse Appleton	1807–1819
William Allen	1820–1839
Leonard Woods, Jr.	1839–1866
Samuel Harris	1867–1871
Joshua L. Chamberlain	1871–1883
William DeWitt Hyde	1885–1917
Kenneth C. M. Sills	1918–1952
James S. Coles	1952–1967
Roger Howell, Jr.	1969–1978
Willard F. Enteman	1978–1980
A. LeRoy Greason	1981–1990
Robert H. Edwards	1990—

(Note: At various intervals, members of the faculty served as acting president of the College.)

Admission to the College

IN MAY 1989, THE GOVERNING BOARDS of Bowdoin College approved the following statement on admissions:

Bowdoin College is, first and foremost, an academic institution. Hence academic accomplishments and talents are given the greatest weight in the admissions process. While accomplishments beyond academic achievements are considered in admissions decisions, these are not emphasized to the exclusion of those applicants who will make a contribution to Bowdoin primarily in the academic life of the College. In particular, applicants with superior academic records or achievements are admitted regardless of their other accomplishments. All Bowdoin students must be genuinely committed to the pursuit of a liberal arts education, and therefore all successful applicants must demonstrate that they can and will engage the curriculum seriously and successfully.

At the same time that it is an academic institution, Bowdoin is also a residential community. To enhance the educational scope and stimulation of that community, special consideration in the admissions process is given to applicants who represent a culture, region, or background that will contribute to the diversity of the College. To ensure that the College community thrives, special consideration in the admissions process is also given to applicants who have demonstrated talents in leadership, in communication, in social service, and in other fields of endeavor that will contribute to campus life and to the common good thereafter. And to support the extracurricular activities that constitute an important component of the overall program at Bowdoin, and that enrich the life of the campus community, special consideration in the admissions process is also given to applicants with talents in the arts, in athletics, and in other areas in which the College has programs. The goal is a student body that shares the common characteristic of intellectual commitment but within which there is a considerable range of backgrounds, interests, and talents.

Although Bowdoin does not require that a student seeking admission take a prescribed number of courses, the typical entering first-year student will have had four years each of English, foreign language, mathematics, and social science, and three to four years of laboratory sciences. Further, most will offer studies in arts, music, and computer science. We strongly recommend that students have typing or keyboard training.

Candidates applying to Bowdoin College are evaluated individually by members of the admissions staff in terms of six factors: academic record, the level of challenge in the candidate's course work, counselor/teacher recommendations and Bowdoin interview, application and essay, overall academic potential, and personal qualities.

APPLICATION AND ADMISSION PROCEDURES

Early Decision

Each year Bowdoin offers admission to approximately one-third of its entering class through two Early Decision programs. Those candidates who are certain that Bowdoin is their first choice and have a high school record that accurately reflects their potential should seriously consider this option, since it may resolve the uncertainty of college admission early in the senior year. The guidelines for Early Decision are as follows:

1. When candidates file a formal application for admission, they must state in writing that they wish to be considered for Early Decision and that they will enroll if admitted. Early Decision candidates are encouraged to file regular applications at other colleges, but only with the understanding that these will be withdrawn and no new applications will be initiated if they are accepted on an Early Decision basis by their first-choice college. In other words, only one Early Decision application may be made, but other regular applications may be initiated simultaneously.

2. The completed Personal Application Form and formal request for Early Decision addendum, a School Report Form, a secondary school transcript of grades, and the two Teacher Comment Forms must be submitted to Bowdoin by November 15 for notification by late December, or by January 15 for notification by mid-February.

3. Candidates admitted via Early Decision who have financial need as established by the guidelines of the College Scholarship Service and based on the Financial Aid Form will be notified of the amount of their award at the time they receive their Early Decision acceptance, provided their financial aid forms are on file at Bowdoin.

4. The submission of College Entrance Examination Board or American College Testing scores at Bowdoin is optional as an admissions requirement. Applicants need not be deterred from applying for Early Decision because they have not completed the CEEB or ACT tests. (However, CEEB or ACT scores are used for academic counseling and placement, and students are required to submit scores over the summer prior to enrolling.)

5. An Early Decision acceptance is contingent upon completion of the senior year in good standing.

6. Many candidates not accepted under the Early Decision program will be transferred to the regular applicant pool. Each year a number of applicants who are deferred under Early Decision are accepted in mid-April, when decisions on all regular admissions are announced. However, some students may be denied admission at Early Decision time if the Admissions Committee concludes that their credentials are not strong enough to meet the overall competition for admissions.

7. Responsibility for understanding and complying with the ground rules of Early Decision rests with the candidate. Should an Early Decision

candidate violate the provisions of the program, the College will reconsider its offer of admission (and financial aid, if appropriate) to the candidate.

Regular Admission

The following items constitute a completed admissions folder:

1. The student's application form submitted with the application fee (\$45) as early as possible in the senior year. The deadline for receiving regular applications is *January 15*. Bowdoin College also accepts the Common Application in lieu of its own form and gives equal consideration to both. Students may obtain copies of the Common Application from their high schools.

2. *School Report*: The college advisor's estimate of the candidate's character and accomplishments and a copy of the secondary school record should be returned to Bowdoin no later than January 15. A transcript of grades through the midyear marking period (Midyear School Report) should be returned to Bowdoin by February 15. If a student matriculates at Bowdoin College, the School Report and secondary school transcript will become part of the permanent college file and will be available for the student's inspection.

3. *Recommendations*: Each candidate is required to submit two Teacher Comment Forms, which should be given to two academic subject teachers for completion and returned as soon as possible and no later than January 15.

4. *College Entrance Examination Board or American College Testing Scores*: Bowdoin allows each applicant to decide if his or her standardized test results should be considered as part of the application. In past years approximately 30 percent of Bowdoin's applicants have decided not to submit standardized test results. In those cases where test results are submitted, the Admissions Committee considers this information as a supplement to other academic information such as the transcript and recommendations. The candidate is responsible for making arrangements to take the College Board examinations and for seeing that Bowdoin receives the scores if he or she wants them to be considered as part of his or her application. Should Bowdoin receive the scores on the secondary school transcript, these scores will be inked out before the folder is read by the Admissions Committee. Candidates may report their scores or instruct the College Board to send the scores to Bowdoin. Students choosing to submit their SAT and Achievement Test scores should complete the entire battery of examinations no later than January of the senior year.

N.B.—Because standardized test results are used for academic counseling and placement, all entering first-year students are required to submit scores over the summer prior to enrolling.

5. *Visit and Interview*: A personal interview at Bowdoin with a member of the admissions staff or senior interviewer is *strongly encouraged* but not required. Distance alone sometimes makes it impossible for candidates to visit the College. The Bowdoin Alumni Schools and Interviewing Committees

(BASIC) are available in most parts of the country to assist those applicants. (For further information on BASIC, see page 212.) Candidates' chances for admission are not diminished because of the lack of an interview, but the interviewers' impressions of a candidate's potential are often helpful to the Admissions Committee. Ten carefully selected and trained Bowdoin senior interviewers conduct interviews to supplement regular staff appointments from September to January.

The Admissions Office is open for interviews throughout the year, except from January 15 to May 1, when the staff is involved in the final selection of the class.

6. *Notification:* All candidates will receive a final decision on their application for admission by early April. A commitment to enroll is not required of any candidate (except those applying for Early Decision) until the Candidates' Common Reply date of May 1. Upon accepting an offer of admission from Bowdoin, a student is expected to include a \$300 admissions deposit, which is credited to the first semester's bill.

7. Candidates requiring an application fee waiver may petition for one through their guidance counselor using the standard CEEB form.

Deferred Admission

Admitted students who wish to delay their matriculation to the College for one year in order to gain increased maturity or experience may request a deferment from the dean of admissions. It is Bowdoin's policy to honor these requests and to hold a place in the next entering class for these students. A \$300 **nonrefundable** admissions deposit must accompany the deferral request.

Admission with Advanced Standing

Bowdoin recognizes the College Entrance Examination Board and the International Baccalaureate programs and may grant advanced placement and credit toward graduation for superior performance in those programs. Applicants to Bowdoin are encouraged to take advantage of these programs and to have test results sent to the Admissions Office. Inquiries may be directed to the registrar.

Decisions on both placement and credit are made by the appropriate academic department in each subject area. Some departments offer placement examinations during the orientation period to assist them in making appropriate determinations. Every effort is made to place students in the most advanced courses for which they are qualified, regardless of whether they have taken AP or IB examinations before matriculation.

Determinations of advanced placement and credit are made during the student's first year at Bowdoin. First-year students may apply a maximum of eight course credits toward the degree from the following sources: Advanced Placement Program, International Baccalaureate Program, and college credits from other institutions earned prior to matriculation.

International Students

The Admissions Committee attempts to assemble a highly diverse entering class and therefore welcomes the perspective that international students bring to the Bowdoin community. In 1992–93, 438 international students applied for admission to Bowdoin. Of these, 31 were admitted and 11 chose to attend.

Admissions policies and procedures for international students are the same as for regular first-year applicants, with the following exceptions:

1. Students whose first language is not English must submit official results of the Test of English as a Foreign Language by February 1.

2. All international students who submit the Foreign Student Financial Aid Form and the Bowdoin College Financial Aid Application will be considered for Bowdoin funds to defray part of their college costs, provided the student and his or her family can pay a portion of the college expenses. Bowdoin has designated two to three fully funded scholarships for international students for each entering class. These scholarships cover the full cost of attendance. The competition for these exceptional financial aid packages is intense. Both first-year and transfer applicants who wish to be considered for financial aid should submit required materials by January 15.

Transfer Students

A limited number of students from other colleges and universities will be admitted each year to sophomore or junior standing at Bowdoin. The following information pertains to transfer candidates:

1. Candidates should file a transfer application by April 15 and include the \$45 application fee. Applicants must arrange to have submitted at the same time transcripts of their college and secondary school records, statements from deans or advisors at their colleges, and at least two recommendations from current or recent professors. Interviews are strongly recommended but not required. As soon as it becomes available, an updated transcript including spring semester grades should also be sent. Candidates whose applications are complete will normally be notified of Bowdoin's decision by late May. The deadline for midyear transfers is November 15; midyear candidates are notified by early January.

2. Transfer candidates should have academic records of Honors quality ("B" work or better) in a course of study that approximates the work that would have been done at Bowdoin, had they entered as first-year students. Bowdoin accepts transfer credit for liberal arts courses in which a grade of C or higher has been received. Further, transfer students should understand that although they may expect an estimate regarding class standing upon transferring, official placement is possible only after updated transcripts have arrived at our Registrar's Office and have been appraised by the dean of the College and the appropriate departments.

3. Two years of residence are required for a bachelor's degree from Bowdoin. Students who have completed more than four semesters of college work are not eligible to transfer.

4. The financial aid funds available for transfer students are limited by commitments the College has already made to enrolled students and incoming first-year students. All transfers are eligible for aid, based on financial need. Applicants for aid must file a Financial Aid Form with the College Scholarship Service by April 1.

Special Students

Each semester, as space within the College and openings within courses permit, Bowdoin admits a few special students who are not degree candidates. In general, this program is intended to serve the special educational needs of residents in the Brunswick area. Those who already hold a bachelor's degree from a four-year college are normally ineligible for the program, although exceptions may be made for teachers wishing to upgrade their skills or for Bowdoin graduates who need particular courses to qualify for graduate programs. One or two courses are charged at a special rate of \$1,100 per course and no more than two courses may be taken each semester. No financial aid is available for special students. Interested applicants should submit the completed special student form and enclose the \$45 application fee at least one month prior to the beginning of the semester. Inquiries should be addressed to the transfer coordinator in the Admissions Office.

PROCEDURE FOR APPLICATION FOR FINANCIAL AID

Students who wish to be considered for financial aid must submit an application each year. A Bowdoin Financial Aid Application is included with the application materials for admission to the College. March 1 is the deadline for filing these applications with the Office of Student Aid (for Early Decision applicants, the Bowdoin Financial Aid Application should be filed by December 1). In addition, all candidates for aid must submit the Free Application for Federal Student Aid (FAFSA) and the Financial Aid Form (FAF) of the College Scholarship Service by March 1.

Candidates should not be discouraged from applying to Bowdoin College for lack of funds. Because of its extensive scholarship grant and loan programs, Bowdoin's financial aid policy is designed to supplement family efforts so that as many students as possible can be admitted each year with the full amount of needed financial assistance. In 1992-93, approximately 40 percent of the entering class of 411 students received need-based grants. The average award of grant and loan was about \$15,782. The amount of assistance intended to meet the individual's need is calculated from the information in the Financial Aid Form. Additional material about the

program of financial aid at Bowdoin can be found on pages 19–21. Awards of financial aid are announced with the letters of admission.

All correspondence concerning first-year and transfer admission to the College and scholarship aid should be addressed to the Dean of Admissions, Bowdoin College, Brunswick, ME 04011; tel. (207) 725-3100.

Expenses

COLLEGE CHARGES

The charges for tuition, room rent, board, and fees for 1993–94 are listed below. These do not include costs for travel, books, or personal expenses; students must budget for such items on their own.

	By Semester		Total For the Year
	Fall	Spring	
Tuition	\$8,987.50	\$8,987.50	\$17,975.00
Board	1,625.00	1,625.00	3,250.00
Room Rent			
Residence Halls	1,302.50	1,302.50	2,605.00
Pine and Harpswell St. Apts.	1,770.00*	1,770.00*	3,540.00*
Other Apartments	1,477.50*	1,477.50*	2,955.00*
Student Activities Fee	82.50	82.50	165.00
Health Services Fee	80.00**	80.00**	160.00**
Telephone Service	—	35.00***	35.00***
Continuation Deposit			300.00+

* When occupancy varies, rates may change accordingly.

** The Health Services Fee is mandatory for all enrolled students.

*** A new student telephone system is expected to be completed by December 1993. If it is implemented, a \$35 per semester charge will be assessed each student affected.

+ The Continuation Deposit is required of all students who plan to continue at Bowdoin. Due March 15, it is applied to the fall semester bill. Failure to register will result in forfeiture of this deposit.

For planning purposes, students and parents should anticipate that tuition and other charges may increase each year to reflect program changes and other cost increases experienced by the College.

Registration and Enrollment

All students are required to register at the opening of each semester in accordance with schedules posted at the College and mailed to students registering for the first time. A fee of \$20 is assessed for late registration.

Refunds

Refunds of tuition and fees for students leaving the College during the course of a semester will be made in accordance with the following refund schedule:

During the first two weeks	80%
During the third week	60%
During the fourth week.	40%
During the fifth week.	20%
Over five weeks.....	No refund

Refunds for board and room will be prorated on a daily basis in accordance with the student's attendance as it relates to the College's calendar, after adjustments for fixed commitments and applicable overhead expense. *Students who are dismissed from the College within the first five weeks for other than academic or medical reasons are not entitled to refunds.* Financial aid awards will be credited in proportion to educational expenses as stipulated in a student's award letter, but in no case will they exceed total charges to be collected. Application for a refund must be made in writing to the cashier of the College within 30 days of the student's leaving.

Tuition

Any student completing the number of courses required for the degree in fewer than eight semesters must pay tuition for eight semesters, although the dean of the College is authorized to waive this requirement if courses were taken away from Bowdoin. The accumulation of extra credits earned by taking more than four courses during a semester shall not relieve the student of the obligation to pay tuition for eight full semesters at Bowdoin College.

There are opportunities at Bowdoin to receive financial aid in meeting the charge for tuition. Detailed information about scholarships, loans, and other financial aid may be found on pages 19–21.

Room and Board

Entering first-year students are guaranteed housing and are required to live on campus. They may indicate their residence needs on a preference card issued by the Dean of Students' Office during the summer preceding their arrival at Bowdoin. The associate dean of students coordinates housing accommodations for the remaining classes through a lottery system, the most equitable approach given the College's limited space for housing.

Residence hall suites consist of a study and bedroom, provided with essential furniture. Students should furnish blankets and pillows; linen and laundry services are available at moderate cost. College property is not to be removed from the building or from the room in which it belongs; occupants are held responsible for any damage to their rooms or furnishings.

Board charges are the same regardless of whether a student eats at the Moulton Union, Coles Tower, or a fraternity. Students who live in Bowdoin facilities, except apartments, are required to take a 19-meal or 14-meal board plan. Partial board packages are available to students living off campus or in College-owned apartments.

Other College Charges

All damage to the buildings or other property of the College by persons unknown may be assessed equally on all residents of the building in which the damage occurred. The Student Activities Fee is set by the student government, and its expenditure is allocated by the Student Activities Fee Committee.

Health Care

The facilities of the Dudley Coe Health Center and the Counseling Service are available to all students. Part of the Health Services Fee covers health and accident insurance, in which all students are enrolled. Insurance offers year-round coverage and can be extended to cover leaves of absence or study away.

Bills are rendered by the College for many medical services provided through the health center. Most of these costs are covered by student health insurance. A pamphlet specifying the coverage provided by student health insurance is available from the cashier and will be included with the first tuition bill each year. Any costs not covered by insurance will be charged to the student's account.

Motor Vehicles

All motor vehicles, including motorcycles and motor scooters, used on campus or owned and/or operated by residents of any College-owned residence or recognized fraternity must be registered with Campus Security. The registration fee is \$10 a year for students living in College housing. For students living off campus in apartments and fraternities, registration is free. Failure to register a motor vehicle will result in a \$25 parking ticket each time the vehicle is found on campus. Students wishing to register a vehicle for a period of time less than one semester must make special arrangements with Campus Security. All students maintaining motor vehicles at the College are required to carry adequate liability insurance. Parking on campus is limited and students will be assigned parking areas according to their living locations.

PAYMENT OF COLLEGE BILLS

Bills for the tuition, board, room rent, and fees for the fall and spring semesters will be sent on or about July 15 and December 15, respectively. Credits (funds actually received) will also appear on the bill. Bowdoin scholarship grants, payments from the family, and any other cash payments are examples of credits. The balance due is the difference between all charges and all credits.

Students and their parents or guardians may pay the College charges as they fall due each semester, or by using one of the installment payment plans offered by Academic Management Services, the Knight Agency, Tuition Management Systems, or The Tuition Plan, Inc. They may also arrange to pay the total due by using a mixture of these two payment options.

The payment dates in the payment plans may not be deferred for the convenience of families using Stafford and parent loans, or other tuition payment programs. Both long- and short-term financial arrangements should be made far enough in advance to assure payment on the required dates. *Students with unpaid bills may not register for or attend classes, nor are they eligible for academic credit, semester grade reports, transcripts, or degrees.*

Late-Payment Charge

The balance due each semester will be considered overdue if not paid within 30 days of the billing date, and any unpaid balance will be subject to a late charge of 12.5% per annum. Any balance that will not be covered by a student loan in process or an anticipated reported scholarship is subject to late charges. Payment plans one month or more in arrears will be assessed late-payment charges on the overdue amount and will otherwise be subject to the same penalties as other overdue accounts.

Financial Aid

BOWDOIN COLLEGE'S FINANCIAL aid policy is designed to supplement family resources so that as many students as possible can attend the College with the full amount of needed assistance. Scholarship grants, loans, and student employment are the principal sources of aid for Bowdoin students who need help in meeting the expenses of their education. Bowdoin believes that students who receive financial aid as an outright grant should also expect to earn a portion of their expenses and that they and their families should assume responsibility for repayment of some part of what has been advanced to help them complete their college course. Consequently, loans and student employment will generally be part of the financial aid award. All awards are made on the basis of satisfactory academic work and financial need, which is a requisite in every case. Applications for financial aid should be submitted to the director of student aid, who coordinates the financial aid program. Submission of the required application forms guarantees that the student will be considered for all the financial aid available to Bowdoin students, including grants, loans, and jobs from any source under Bowdoin's control.

Since its founding, Bowdoin College has been fortunate to have had many close friends, including alumni, faculty, and others, who have either bequeathed or made outright gifts in support of its endowment for scholarships and loan funds. Information on the availability of scholarship and loan funds may be obtained through the College's Student Aid Office. Questions regarding endowed funds and the establishment of such funds should be directed to the Office of Development.

In 1992-93, Bowdoin distributed a total of about \$7,750,000 in need-based financial aid. Grants totaled about \$6,350,000 in 1992-93 and were made to about 40 percent of the student body. Long-term loans continue to be an integral part of financial aid, supplementing scholarship grants. The College provides about \$800,000 to aid recipients each year from loan funds under its control; another \$600,000 in loan aid comes from private lenders under the terms of the federal Stafford program.

Long-term loans may also be made to students not receiving scholarship grants. These loans, including Stafford Loans, Perkins Loans, and Bowdoin College Consolidated Loans, bear no interest during undergraduate residence. Interest is charged at 5% for the latter two loans; interest on Stafford Loans is variable, with a maximum rate of 9%. Payment over a ten-year period begins six months after graduation, or separation, or after graduate school; two or three years of deferment are possible for various categories of service or internships. Perkins Loans also provide for the cancellation of some payments for persons who become teachers and/or who serve in the Peace Corps or Vista, and for several other types of service. Small, short-term loans are available upon application at the Business Office.

The student employment program offers a wide variety of opportunities to undergraduates. These include direct employment by the College, employment by the fraternities, and employment by outside agencies represented on the campus or located in the community. College policy is to give priority in hiring to students of recognized financial need. However, there is no limitation on students as to who may work on campus. Employment opportunities are open to all students who are interested, able, and willing to work. Commitments for employment are made to first-year students at the opening of College in the fall. The annual student payroll currently stands at about \$700,000.

The College participates in the Work-Study Program established under the Economic Opportunity Act of 1964, the Supplementary Educational Opportunity Grants Program established under the Higher Education Act of 1965, and the Pell Grant Program established under the Higher Education Amendments of 1972. The College also works closely with several states that can provide handicapped students and those receiving other forms of state aid with financial assistance to help with their educational expenses.

Application for Financial Aid

Students who wish to be considered for financial aid must submit an application each year. A Bowdoin Financial Aid Application is included with the application materials for admission to the College. March 1 is the deadline for filing these applications with the Office of Student Aid (for Early Decision applicants, the Bowdoin Financial Aid Application should be filed by December 1). In addition, all candidates for aid must submit the Free Application for Federal Student Aid (FAFSA) and the Financial Aid Form (FAF) of the College Scholarship Service by March 1.

Continuing students must also complete the Bowdoin Financial Aid Application, the Free Application for Federal Student Aid, and the Financial Aid Form of the College Scholarship Service between February and April. Forms and more detailed information are available from the Student Aid Office.

Transfer students applying for aid must file a Financial Aid Form with the College Scholarship Service by April 1 and send the Bowdoin Financial Aid Application and a Financial Aid Transcript (available from their previous college) to the Student Aid Office.

Prematriculation Scholarships

About 160 entering students each year receive prematriculation awards to help them meet the expenses of their first year. Recently the awards have ranged from \$500 to \$24,000. As noted above, some awards are direct grants, but most include the tender of loans. The size and nature of these awards depend upon the need demonstrated by the candidates. Applications should be made by March 1 of each year. Candidates will be notified of a

prematriculation award at the time they are informed of the decision on their applications for admission, usually about April 5.

The general basis for determining the amount of all prematriculation scholarships is the individual's financial need. Need is determined by an analysis of the statements of financial resources submitted to the Student Aid Office on the aid forms.

First-year students who hold prematriculation awards may be assured of continuing financial aid that meets their needs in subsequent years if their grades each semester are such as to assure progress required for continued enrollment (see General Regulations, "Deficiency in Scholarship," pages 29–30). In the sophomore, junior, and senior years, as a student's earning power becomes greater, the proportion of financial aid offered as a grant will be progressively decreased, and that offered as a loan increased, except in the case of certain scholarships where the award must be made as a grant.

All awards of financial aid made in anticipation of an academic year, including the first year, will remain in effect for the full year unless the work of the holder is unsatisfactory. Awards for such students may be reduced or withdrawn for one semester. Awards may also be reduced or withdrawn for gross breach of conduct or discipline.

General Scholarships

Awards similar to prematriculation scholarships are granted to undergraduates already enrolled in college on the basis of their academic records and their financial need. Normally, these awards are made at the end of one academic year in anticipation of the next, but applications may be made in November for aid to be assigned during the spring semester on a funds-available basis. Awards made for a full year are subject to the same provisions covering prematriculation awards, but those made for a single semester are not considered as setting award levels for the following year.

Graduate Scholarships

Bowdoin is able to offer a number of scholarships for postgraduate study at other institutions. Grants of various amounts are available to Bowdoin graduates who continue their studies in the liberal arts and sciences and in certain professional schools. Awards up to full tuition are possible for those attending Harvard University's medical, law, or business schools. In 1992–93, Bowdoin provided \$387,100 in graduate scholarship assistance to 120 students. Further information about these scholarships is available through the Student Aid Office.

Special Funds

Income from these funds is used to assist students with special or unexpected needs. Further information is available through the Office of the Dean of the College.

The Curriculum

BOWDOIN DOES NOT PRESCRIBE specific liberal arts courses for all students. Instead, each student determines, with the help and approval of an academic advisor, an appropriate pattern of courses. To ensure that students explore the breadth of the curriculum before settling upon a major, they are expected to complete two courses each in natural science and mathematics, social and behavioral sciences, and humanities and fine arts; two courses must also be designated as non-Eurocentric studies. Courses, it is assumed, do not lead simply to other courses in the same subject. Properly taught, they should raise questions and evoke a curiosity that other disciplines must satisfy. The College also recognizes through its course offerings the importance of relating a liberal education to a society whose problems and needs are continually changing.

The breadth of a liberal arts education is supposed to distinguish it from professional training, and its depth in one field, from dilettantism, although in fact it shares qualities of both. Bowdoin encourages students to extend their concerns and awareness beyond the personal. At the same time, the College helps students to integrate curricular choices in accordance with individual intellectual needs. Interaction between the students and their academic advisors is a vital part of this educational experience.

Each student is assigned an academic advisor at the start of the first year. Students generally maintain this relationship for the first two years. Whenever possible, the dean of students assigns advisors on the basis of students' intellectual interests. Advisors and students meet regularly during orientation prior to fall semester classes and on an individual basis thereafter. During the first week of classes, the student selects courses and receives approval from the advisor through a signature on the registration card.

Students elect a major during the second semester of the sophomore year. After registering for a major, a student is advised by a member of his or her major department.

REQUIREMENTS FOR THE DEGREE

To qualify for the bachelor of arts degree, a student must have

1. successfully passed 32 courses;
2. spent four semesters (passing at least 16 courses) in residence, at least two of which will have been during the junior and senior years;
3. completed at least two semester courses in each of the following divisions of the curriculum—natural science and mathematics, social and behavioral sciences, and humanities and fine arts—and two semester courses in non-Eurocentric studies; and

4. completed a departmental major or majors, an interdisciplinary major, or a student-designed major (a departmental minor may be completed with any of the preceding).

DISTRIBUTION REQUIREMENTS

Distribution requirements should normally be completed by the end of the sophomore year. Students must take two courses from each of the three divisions of the curriculum, with two courses in non-Eurocentric studies. A course that satisfies the non-Eurocentric studies requirement may also count for its division. Because these requirements are intended to apply to the college liberal arts experience, they may not be met by Advanced Placement or International Baccalaureate credits, but may be met, under the supervision of the Recording Committee, by credits earned while studying away from Bowdoin. Areas of distribution are defined as follows:

Natural Science and Mathematics: Biochemistry, biology, chemistry, computer science, geology, mathematics, neuroscience, physics, and certain environmental studies courses. (Designated by the letter *a* following a course number in the course descriptions.)

Social and Behavioral Sciences: Africana studies, economics, government, psychology, sociology and anthropology, and certain Asian studies, environmental studies, history, and women's studies courses. (Designated by the letter *b* following a course number in the course descriptions.)

Humanities and Fine Arts: Art, classics, education, English, dance, German, music, philosophy, religion, Romance languages, Russian, most history courses, and certain Asian studies and women's studies courses. (Designated by the letter *c* following a course number in the course descriptions.)

Non-Eurocentric Studies: Students must take two courses that focus on a non-Eurocentric culture or society, exclusive of Europe and European Russia and their literary, artistic, musical, religious, and political traditions. The requirement is intended to introduce students to the variety of cultures and to open their minds to the different ways in which people perceive and cope with the challenges of life. Though courses primarily emphasizing North American and European topics will not count toward this requirement, courses focusing on African-American, Native American, or Latin American cultures will meet the requirement. *Language courses do not meet this requirement.* (Designated by the letter *d* following a course number in the course descriptions.)

THE MAJOR PROGRAM

Students may choose one of six basic patterns to satisfy the major requirement at Bowdoin: a departmental major, two departmental majors, an interdisciplinary major, a coordinate major, a student-designed major, or any

of the preceding with a departmental minor. Majors are offered in the following areas:

Africana Studies	Government and Legal Studies
Anthropology	History
Art History	Mathematics
Asian Studies	Music
Biochemistry	Neuroscience
Biology	Philosophy
Chemistry	Physics and Astronomy
Classics and Classics/Archaeology	Psychology
Computer Science	Religion
Economics	Romance Languages
English	Russian
Environmental Studies	Sociology
Geology	Studio Art
German	Women's Studies

Each student must choose a major by the end of the sophomore year after consultation with the department or departments involved. No student will be accepted as a major in any department until that student has passed the courses required for admission to that major. Students may add or change majors and/or minors until the end of the first semester of their senior year. Changes by seniors in interdisciplinary or self-designed majors require the approval of the Recording Committee. A student who has not been accepted in a major department may not continue registration.

Departmental Major

All departments authorized by the faculty to offer majors specify the requirements for the major in the catalogue. A student may choose to satisfy the requirements of one department (single major) or to satisfy all of the requirements set by two departments (double major). A student may drop a second departmental major by notifying both the registrar and the department concerned at any time.

Interdisciplinary Major

As the intellectual interests of students and faculty alike have reached across departmental lines, there has been a growing tendency to develop interdisciplinary majors. Interdisciplinary majors are designed to tie together the offerings and major requirements of two separate departments by focusing on a theme that integrates the interests of those two departments. Such majors usually fulfill most or all of the requirements of two separate departments and usually entail a special project to achieve a synthesis of the disciplines involved.

Anticipating that many students will be interested in certain patterns of interdisciplinary studies, several departments have specified standard require-

ments for interdisciplinary majors. For descriptions of these interdisciplinary majors, see pages 126–28.

A student may take the initiative to develop an interdisciplinary major by consulting with the chairs of the two major departments. A student may not select an interdisciplinary major after the end of the junior year.

Student-Designed Major

In some cases, a student may wish to pursue a major program that does not fit either of the patterns described above. The faculty has authorized a pattern that permits a student working together with two faculty members to develop a major program that may draw on the offerings of more than two departments. Guidelines for the development of student-designed majors are available from the Registrar's Office; student-designed majors require the approval of the Recording Committee. Students should apply for a student-designed major before the end of the sophomore year.

Coordinate Major

The coordinate major is currently offered only in relation to the Africana Studies Program and the Environmental Studies Program. For a specific description of these majors, see pages 36–40 and 89–93.

The Minor

All departments and some programs offer a minor program consisting of no fewer than four courses and no more than seven courses, including all prerequisites. A minor program must be planned with and approved by the student's major department, and approved by the student's minor department. A minor may be dropped at any time by notifying both the registrar and the department or program concerned, but may not be added after the end of the first semester of the senior year.

Independent Study

With departmental approval, a student may elect a course of independent study under tutorial supervision. A department will ordinarily approve one or two semesters of independent study for which regular course credit will be given. A definite plan for the project approved by the department and the tutorial advisor must be presented to the registrar by the end of the first week of classes. Where more than one semester's credit is sought for a project, the project will be subject to review by the department at the end of the first semester. In special cases the Recording Committee, upon recommendation of the department, may extend credit for additional semester courses beyond two. In independent study courses that will continue beyond one semester, instructors have the option of submitting at the end of each semester, except the last, a grade of S in place of a regular grade. A regular grade will be submitted at the end of the final semester of independent study and will become the grade for the previous semesters of independent work.

There are normally two kinds of independent study and each should be registered for under the appropriate course number. A directed reading course designed to allow a student to explore a subject not currently offered within the curriculum shall be numbered **291, 292, 293, or 294**. An independent study that will culminate in a substantial and original research, fine arts, music, or creative writing project or that is part of a departmental honors program shall be numbered **401** or higher. In most departments, the project will consist of a written dissertation or an appropriate account of an original investigation, but projects in music, the fine arts, and letters are also encouraged. Independent study may not be taken on a Credit/Fail basis.

ACADEMIC REGULATIONS

Course Load

Students are required to take the equivalent of four full courses each semester. Students wishing to take more than *five* courses must have the permission of the dean of students. A student may not take five courses in the semester following the receipt of an F without the dean's approval. Juniors or seniors who have accumulated extra credits may apply to the dean for permission to carry a three-course load once during their last four semesters at Bowdoin. No extra tuition charge is levied upon students who register for more than four courses, and, by the same token, no reduction in tuition is granted to students who choose to register for three courses.

Course Examinations

The regular examinations of the College are held at the close of each semester. An absence from an examination may result in a grade of F. In the event of illness or other unavoidable cause of absence from examination, the dean of students may authorize makeup of the examination.

Course Grades

Course grades are defined as follows: A, excellent; B, good; C, fair; D, poor; F, failing. A grade of D indicates work that in at least some respects falls below the acceptable standard for academic work at Bowdoin; only a limited number of D grades may be counted toward the requirements for graduation (see "Deficiency in Scholarship," below).

Most departments will not accept as prerequisites or as satisfying the requirements of the major, courses for which a grade of D has been given. Questions should be referred directly to the department chair. Students who receive a grade of D or F in a course may retake the course. Both courses and both grades will appear on the transcript, but only one course credit will be given for successful completion of a given course.

In independent study courses that will continue beyond one semester, instructors have the option of submitting at the end of each semester, except the last, a grade of S (for Satisfactory) in place of a regular grade. A regular

grade shall be submitted at the end of the final semester and shall become the grade for the previous semesters of independent study. Prior to September 1991, Bowdoin used a four-point grading system of High Honors, Honors, Pass, and Fail.

Incompletes

With the approval of the dean and the instructor, a grade of Incomplete may be recorded in any course for extenuating circumstances such as family emergency, illness, etc. At the time an Incomplete is agreed upon by the dean, the student, and the instructor, a date shall be set by which all unfinished work must be submitted by the student to the instructor. Ordinarily, this will be no later than the end of the second week of classes of the following semester. The instructor should submit a final grade within two weeks of this date. If the course work is not completed within the specified time limit, the registrar will change the Incomplete to Fail. Any exceptions to this rule or a change of the specified time limit may require approval of the Recording Committee.

Credit/Fail Option

A student may elect to enroll in a limited number of courses on a Credit/Fail basis. Graduation credit is given for courses in which a grade of Credit is received. A student may elect no more than one course of the normal four-course load each semester on a Credit/Fail basis, although a student may elect a fifth course any semester on a Credit/Fail basis. No more than four of the thirty-two courses required for graduation may be taken on a Credit/Fail basis; courses in excess of the thirty-two required may be taken for Credit/Fail without limit as to number. No course may be changed from graded to Credit/Fail or vice versa after the first week of classes. Most departments require that all courses taken to satisfy requirements of the major be graded.

Grade Reports

A report of the grades of each student is sent to the student at the close of each semester.

The Dean's List

Students who in a given semester receive grades of A or B in at least the equivalent of four full-credit courses (no grade lower than a B) are placed on the Dean's List for that semester. A grade of Credit or Satisfactory may not be substituted for one of the required letter grades. A student whose Satisfactory grade is later converted to an A or a B, and who thereby becomes eligible for the Dean's List, will be placed on the Dean's List retroactively.

Maximum Residency

No student will ordinarily be permitted to remain at Bowdoin for more than nine semesters of full-time work.

Senior Course Selection

A student may be required to take a course in his or her major department in each semester of the senior year at the department's discretion.

Leave of Absence

A student in good standing may, with the approval of his or her advisor, apply to the Recording Committee for a leave of absence for nonacademic pursuits for one or two semesters. The leave must begin at the end of a regular semester. A student on approved leave is eligible for financial aid upon his or her return. A student wishing to apply for a leave of absence for one or both semesters of an academic year must submit an application by March 1 of the previous academic year. Applications for leave of absence submitted during the fall semester requesting a leave for the next spring semester will be considered only in the most urgent circumstances. Academic credit may not be transferred to Bowdoin for courses taken while on leave.

THE AWARD OF HONORS

Departmental Honors

The degree with honors, high honors, or highest honors in a major subject is awarded to students who have distinguished themselves in that subject. The award is made by the faculty upon recommendation of the department.

All written work in independent study accepted as fulfilling honors requirements shall be deposited in the library in a form specified by the Library Committee.

General Honors

General Honors are awarded on the basis of all grades in a student's final six semesters at Bowdoin, except that a student who receives a grade of D or F in any course at Bowdoin or in any course at an institution from which academic credit is being transferred to Bowdoin is normally not eligible for General Honors. Students who have studied at Bowdoin for fewer than six semesters are normally not eligible. The Recording Committee considers petitions for exceptions to the normal criteria.

A degree *cum laude* shall be awarded to a student who receives at least 75 percent grades of B/Honors or A/High Honors. Within these grades, there must be two grades of A/High Honors for each grade of C/Pass.

To receive a degree *magna cum laude*, a student shall fulfill the requirement for a degree *cum laude*, with the additional stipulation that at least 30 percent of the grades must be A/High Honors in addition to the grades of A/High Honors balancing the grades of C/Pass.

The degree *summa cum laude* shall be awarded to a student who receives at least 70 percent grades of A/High Honors and the balance B/Honors.

DEFICIENCY IN SCHOLARSHIP

Students are expected to make “normal progress” toward the degree. Normal progress is defined as passing the equivalent of four full-credit courses each semester. Students may not matriculate in a fall semester if they are more than two course credits short of normal progress. Students who fail to meet this matriculation standard are expected to make up deficient credits in approved courses at another accredited institution of higher education.

The Recording Committee is responsible for ensuring that students’ academic records meet acceptable standards. To monitor substandard academic performance, Bowdoin uses a system of academic probations.

Academic Probation

Students will be placed on academic probation for one semester if they

1. receive two Fs, one F and two Ds, or four Ds in their first semester as first-year students at Bowdoin;
2. receive one F or two Ds in any one subsequent semester;
3. receive a cumulative total of four Ds or two Fs during their tenure at Bowdoin.*

Students will remain on academic probation if they receive one D while on academic probation. Students who are on academic probation will be assigned to work closely with their academic advisor. Students who are on academic probation are not eligible to study away.

Academic Suspension

Students will be subject to academic suspension if they

1. receive four Fs in their first semester as first-year students at Bowdoin;
2. receive two Fs, one F and two Ds, or four Ds in any subsequent semester;
3. receive one F or two Ds while on academic probation;
4. receive a cumulative total of three Fs, two Fs and two Ds, one F and four Ds, or six Ds during their tenure at Bowdoin.*

Students who are suspended for academic deficiency are normally suspended for at least one academic year. Suspended students must apply for readmission and must present grades of C or better in approved courses from another accredited four-year institution to make up their credit deficiency before they will be approved for readmission. Students who are readmitted are eligible for financial aid, according to demonstrated need.

*In the computation of cumulative grades for probation, suspension, or dismissal, grades earned in the first semester of the first year are given half weight.

Permanent Dismissal

Students will be subject to permanent dismissal if they

1. incur a second academic suspension; or
2. receive a fifth F or a ninth D, or some equivalent combination of Fs and Ds where one F is equivalent to two Ds,* during their tenure at Bowdoin.

ADDITIONAL AREAS OF ACADEMIC INTEREST

Architectural Studies

Although the College offers no special curriculum leading to graduate study in architecture, students interested in a career in this field should consult with members of the Studio Art Division of the Department of Art as early as possible. In general, students should develop the ability to conceive and articulate architectural and spatial concepts in two and three dimensions and to render visual ideas through drawing and model making.

Arctic Studies

A concentration in arctic studies, offered through the Department of Sociology and Anthropology, the Department of Geology, and the Peary-MacMillan Arctic Museum and Arctic Studies Center, provides students with opportunities to explore cultural, economic, and environmental issues involving arctic lands and peoples. Students interested in the Arctic are encouraged to consult with the director of the Arctic Studies Center in order to plan an appropriate interdisciplinary program, involving course work and fieldwork at Bowdoin and in the North.

Engineering Programs

Through an arrangement with the School of Engineering and Applied Science of Columbia University and with the California Institute of Technology, qualified students may transfer into the third year of an engineering option after completing three years at Bowdoin. After the completion of two full years at the engineering school, a bachelor of arts degree is awarded by Bowdoin and a bachelor of science degree by the engineering school. Students should be aware that admission to these schools is not automatic and does not assure financial aid.

Students interested in these programs should start planning early and should consult regularly with James H. Turner of the Department of Physics. All students must take **Physics 103, 223, 227, and 228; Chemistry 109; Mathematics 161, 171, and 181; and Computer Science 101**. They are also expected to have at least ten semester courses outside of mathematics and science. Economics is strongly suggested.

*In the computation of cumulative grades for probation, suspension, or dismissal, grades earned in the first semester of the first year are given half weight.

First-Year Seminars

Please see First-Year Seminars on pages 94–100.

Foreign-Language Literature Courses in Translation

Each year the Departments of Africana Studies, Asian Studies, Classics, German, Romance Languages, and Russian may offer literature courses in English translation that are open to students with no training in the foreign language. For full course descriptions and prerequisites, see the appropriate department listings, pages 36, 47, 63, 105, 162, and 168.

Health Professions

Members of the Health Professions Advisory Committee chaired by the advisor for the health professions, Samuel S. Butcher, Department of Chemistry, are available to discuss career interests and undergraduate course programs. The Office of Career Services maintains a collection of reference materials regarding careers in the various health professions, as well as information about summer internship programs. In addition, Sue Livesay, associate director, is available to discuss career planning in the medical sciences.

A meeting of students interested in the health professions is held at the opening of College each fall. Other meetings intended to be of help and interest to students preparing for health professions are announced during the year.

Legal Studies

Students considering the study of law should consult with the Legal Studies Advisory Group and the Office of Career Services. Members of the Legal Studies Advisory Group include Craig A. McEwen, Department of Sociology and Anthropology; Richard E. Morgan and Allen L. Springer, Department of Government and Legal Studies; Lisa Tessler, Office of Career Services; and George S. Isaacson, Esq. These individuals assist students in designing a coherent liberal arts program that relates to the study of law and allied fields, and provide guidance on all aspects of the application process.

Bowdoin participates with Columbia University in an accelerated interdisciplinary program in legal education. Under the terms of this program, Bowdoin students may apply to begin the study of law after three years at Bowdoin. Students who successfully complete the requirements for the J.D. at Columbia also receive an A.B. from Bowdoin.

Lesbian and Gay Studies

Lesbian and gay studies is an interdisciplinary analysis that both considers the specific cultural achievements of gay men and lesbians, and takes the experience of lesbians and gay men as a critical perspective on the role of sexuality in culture as a whole. Although the College offers no formal program in lesbian and gay studies, students interested in the field should

consult with the Lesbian and Gay Studies Committee. The following courses address questions of sexuality and might help students to gain a sense of issues relevant to lesbian and gay studies: **English 11, 280, 300, 314, 315, and 316; Environmental Studies 390; and Sociology 219 and 252.**

Teaching

Students interested in teaching in schools or enrolling in graduate programs in education should discuss their plans with personnel in the Department of Education as soon as possible. Because courses in education and psychology, along with a major in a teaching field, are necessary for certification, it is wise to begin planning early so that schedules can be accommodated. An extensive resource library in the Department of Education office contains information about graduate programs, summer and academic year internships, volunteer opportunities with youth and in the schools, and public and private school openings. Career advising and placement services are also available.

OFF-CAMPUS STUDY

Bowdoin offers its students the opportunity to participate in a variety of programs sponsored by other institutions and organizations. Study away must be approved by the College's Committee for Off-Campus Study and the student's major department. Students contemplating off-campus study are urged to consult early with the off-campus study coordinator and their prospective major department. Requests for permission to study away must be filed prior to March 1 of the academic year preceding attendance. (Individual program deadlines may vary considerably, and students must plan accordingly.) The necessary forms and information about many specific programs and requirements for participation in them are available from the Office of Off-Campus Study. Student evaluations are also available.

Students may apply for study away in the United States or virtually any other country. Individual academic departments maintain lists of previously approved programs. These lists can be obtained from the departments or from the Off-Campus Study Office. With faculty endorsement, other arrangements are possible. Study at other institutions should be considered primarily as an extension of Bowdoin's academic program. A student's academic motivation is therefore the essential criterion for approval of any study-away plans.

Bowdoin College is directly affiliated with the following programs:

Intercollegiate Center for Classical Studies in Rome

The Intercollegiate Center for Classical Studies in Rome, established in 1965, provides undergraduates with an opportunity to study Roman art, archaeology, and history, as well as Greek and Roman literature, Italian language, and Renaissance and baroque Italian art. Under the auspices of a

consortial arrangement directed by Stanford University Overseas Studies, ICCS operates two semesters each academic year; students drawn from approximately 40 participating institutions generally enroll for one semester during their junior year. Further information about the program may be obtained from Barbara Weiden Boyd in the Department of Classics.

Intercollegiate Sri Lanka Education (ISLE) Program

The ISLE Program is a Bowdoin-administered annual study program in Kandy, Sri Lanka. Established in 1981, and affiliated with the University of Peradeniya, ISLE provides up to twenty students with the opportunity to pursue academic interests in South Asia. Course offerings include required language study, ancient and modern history, Buddhist philosophy and practice, social and gender issues, literature and folklore, politics and government, economics, dance, and independent study. Students live with Sri Lankan host families and tour important archaeological and religious sites during the program, and are encouraged to visit India or other Asian countries after it concludes. Bowdoin grants five course credits for the fall semester, and up to three additional credits for individually tailored courses in the optional spring semester. Interested students should consult the ISLE administrator, Ted Adams, at 38 College Street on campus.

South India Term Abroad (SITA) Program

The SITA Program, administered by Bowdoin, operates annually in Tamil Nadu, India. Designed primarily for non-South Asia specialists, SITA offers a standardized curriculum in the fall semester, with courses in language, history, religion, literature, social and cultural issues, and independent study, for which Bowdoin grants five course credits. An extension of one to three months, for up to three credits in individually tailored courses, is available for exceptional students. Participants live with host families and tour several regions in South India during the program, and may travel in other parts of South Asia after its conclusion. Bowdoin's SITA faculty advisor is Sara A. Dickey, Department of Sociology and Anthropology and the Asian Studies Program, and the SITA administrator is Ted Adams, whose office is at 38 College Street.

The Swedish Program in Organizational Studies and Public Policy

The Swedish Program is sponsored by the University of Stockholm and a consortium of American colleges and universities, including Bowdoin. It offers students the opportunity to spend either a semester or a year studying comparative institutional organization and public policy in complex industrial societies. Most courses are interdisciplinary in nature. The only required course is Swedish language, but nearly all students take *The Swedish Model and Comparative Public Policy*. A sampling of elective courses for 1993–94 includes *Democracy and Women's Organizations, Sweden and the Global Economy*, and *Scandinavian Literature*. The two-week orientation and some

courses include study trips, and there are week-long study visits to Berlin and Budapest. Students may reside with Swedish families in and near Stockholm or in campus dormitories. The Bowdoin faculty advisor is David J. Vail, Department of Economics.

Twelve College Exchange

The Twelve College Exchange provides Bowdoin students with the opportunity to study for a year at Amherst, Connecticut, Dartmouth, Mount Holyoke, Smith, Trinity, Vassar, Wellesley, Wheaton, or Williams Colleges or Wesleyan University. Also available through the Twelve College Exchange are the *Williams College–Mystic Seaport Program in American Maritime Studies* and the *National Theater Institute*. The deadline for all Twelve College programs is February 1 of the academic year preceding attendance. Further information is available from the off-campus study coordinator.

Courses of Instruction

THE DEPARTMENTS OF INSTRUCTION in the following descriptions of courses are listed in alphabetical order. A schedule containing the time and place of meeting of all courses will be issued before each period of registration.

EXPLANATION OF SYMBOLS USED

[Bracketed Courses]: All courses not currently scheduled for a definite semester are enclosed in brackets.

* On leave for the fall semester.

** On leave for the spring semester.

† On leave for the entire academic year.

a: Satisfies one semester of the distribution requirement for natural science and mathematics.

b: Satisfies one semester of the distribution requirement for social and behavioral sciences.

c: Satisfies one semester of the distribution requirement for humanities and fine arts.

d: Satisfies one semester of the distribution requirement for non-Eurocentric studies.

Prerequisites: Unless otherwise stated in the description, a course is open to all students.

Course Numbering. Courses are numbered according to the following system:

10–29	First-year seminars
30–99	Courses intended for the nonmajor
100–199	General introductory courses
200–289	General intermediate-level courses
290–299	Independent study: Directed reading
300–399	Advanced courses, including senior seminars and topics courses
400	Independent study: Original or creative projects and honors courses

Africana Studies

Administered by the Committee on Africana Studies

Randolph Stakeman, *Program Director*

Africana studies is an interdisciplinary program designed to bring the scholarly approaches and perspectives of several traditional disciplines to bear on an understanding of black life. Emphasis is placed on the examination of the rich and varied cultures, literature, and history of black people in Africa and in the African diaspora, including the United States, the Caribbean, and Latin America. Such a systematic interdisciplinary approach captures the historic, multifaceted quality of African-American scholarship and allows the student to integrate effectively the perspectives of several academic departments at the College.

Requirements for the Major in Africana Studies

The major in Africana studies consists of five required core courses, a concentration of four additional courses, and a one-semester research project, for a total of ten courses. The core courses—**Africana Studies 101** or **102**; **Sociology 208**; **English 275** or **276**; **History 243** or **256**; and **History 261** or **267**—have been chosen to give the student a thorough background for the study of the black experience and to provide an introduction to the varied disciplines of Africana studies.

The five-course concentration is intended to bring the methodologies and insights of several disciplines to a single problem or theme. Suggested concentrations are Race and Class in American Society, Cultures of the African Diaspora, Political Economy of Blacks in the Third World, the Arts of Black America, and the coordinate major. Appropriate courses to be taken should be worked out by the student and the director of the Africana Studies Program.

Alternatively, the student and the director may devise a concentration around another specific theme and submit a proposal to the Committee on Africana Studies for its approval. In addition, the research project, normally completed in the senior year, allows students to conduct research into a particular aspect of the black experience. Students may complete their research project as part of a 300-level course cross-listed in the program, or as an independent study under the direction of one of the program's faculty. Students should consult with the director concerning courses offered in previous years that may satisfy the program requirements.

Coordinate Major in Africana Studies

The purpose of the coordinate major is to encourage specialization in Africana studies within the framework of a recognized academic discipline. This major is, by nature, interdisciplinary, and strongly encourages indepen-

dent study. The coordinate major entails completion of an ordinary departmental major in sociology, anthropology, or history. The student is expected to take those courses within the major department that are cross-listed in the Africana Studies Program insofar as departmental major requirements permit. In addition, the student must take **Africana Studies 101** and four other courses outside the major department approved by the director of Africana studies. Students electing the coordinate major are required to carry out scholarly investigation of a topic relating to the African-American experience; not more than one of the elective courses may normally be an independent study course (**Africana Studies 290** or **400**).

51c,d. Myth and Heroic Epic of Africa. Spring 1994. MR. HODGE.

A study of the pantheons and tales of gods and heroes from a range of geographical areas and language groups of sub-Saharan Africa. The tales are analyzed for form and content, with some comparisons to relevant classical and European material. *Taught in English.*

[**101b,d. The African Diaspora.**]

(Same as **History 161**.)

102c,d. The Autobiography of African America. Fall 1993. MR. STAKEMAN.

A survey of African-American thought and experience as it is revealed through the autobiography, one of the first literary genres developed by African Americans. Works to be covered may include such classic autobiographies as *Narrative of the Life of Frederick Douglass*, Richard Wright's *Black Boy*, and *The Autobiography of Malcolm X*, among others. (Same as **History 131**.)

208b,d. Race and Ethnicity. Fall 1993. MR. MCEWEN.

The social and cultural meaning of race and ethnicity, with emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons among racial and ethnic minorities in the United States and between their situations and those of minorities in other selected societies. (Same as **Sociology 208**.)

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

241c. The Civil Rights Movement. Fall 1994. MR. LEVINE.

Concentrates on the period from 1954 to 1970 and shows how various individuals and groups have been pressing for racial justice for decades. Special attention is paid to social action groups ranging from the NAACP to the SNCC, and to important individuals, both well known (Booker T. Washington) and less well known (John Doar). Readings mostly in primary sources. Extensive use of the PBS video series "Eyes on the Prize." (Same as **History 243**.)

256c,d. Comparative Slavery. Fall 1994. MR. WELLS.

Examines the comparative evolution of slavery from ancient times through the nineteenth century. After a careful consideration of a number of reference points from the Old World—Ancient Greece, Rome, and Christianity—the bulk of the course investigates slavery in Latin America and the United States. Topics include the nature of slavery; slavery, power, and the legal process; the slave trade; the family; religion; rebellions and everyday forms of resistance; and abolition and its aftermath. (Same as **History 256.**)

261c,d. Precolonial Africa: Middle Ages to 1800. Fall 1994.

MR. MANCHUELLE.

A survey of the history of sub-Saharan Africa during the precolonial period, from the origins to the beginning of European colonial penetration ca. 1800, including developments in culture, society, politics, and foreign relations, especially with the Islamic and Western worlds. (Same as **History 261.**)

267c,d. Modern Africa: 1800 to the Present. Spring 1994 and spring 1995. MR. MANCHUELLE.

A survey of the history of sub-Saharan Africa from 1800 to the present, including developments in culture, society, politics, and foreign relations, especially with the Islamic and Western worlds. (Same as **History 267.**)

275c,d. African-American Fiction: History and Ideology. Spring 1994.

MS. MUTHER.

An anti-survey: We work chronologically from the eighteenth to the twentieth century, but compare works in the “tradition” of African-American literature with revisions of history offered by recent African-American writers. Pairs of writers may include Wheatley and Lorde, Equiano and Johnson, Jacobs and Morrison, Hughes and Brooks, Hurston and Walker, Wright and Wideman. (Same as **English 275.**)

276c,d. African-American Poetry: The Harlem Renaissance. Fall 1993.

MS. MUTHER.

Readings of poetry from Paul Laurence Dunbar to Sterling Brown frame our discussions of the Harlem Renaissance, the black literary and cultural call-to-arms of the 1920s. We consider the international context for African-American arts, including music, of this period, as well as the “history-making” and “race-building” aspirations of Harlem-based writers and intellectuals. One important focus is the politics of gender during this decade. Authors include DuBois, Johnson, Toomer, Hughes, McKay, Cullen, Locke, Garvey, Fisher, Larsen, Bonner, West, and Hurston. Leading black periodicals of the decade—*Crisis*, *The Messenger*, *Opportunity*, and *Fire!!*—are also examined. (Same as **English 276.**)

[335c,d. The African-American Critique of America.]

(Same as **History 335.**)

290b,c. Intermediate Independent Study.

400b,c. Advanced Independent Study and Honors.

CROSS LISTINGS

(For full course descriptions and prerequisites, see the appropriate department listings.)

English

317c. Civil Rights and Black Power: Literature from 1950 to the Present. Spring 1994. Ms. MUTHER.

(Same as **Africana Studies 317.**)

Environmental Studies

390. In Search of the Common Good—A Critical Look at Feminism, Multiculturalism, and Ecology. Spring 1994. MR. RENSENBRINK.

(Same as **Africana Studies 390** and **Women's Studies 390.**)

Prerequisites: Two or more lower-level courses in one or more of the four interdisciplinary programs, or permission of the instructor. Enrollment limited to 15 students. Preference given to seniors.

Government and Legal Studies

102b. Caribbean Forms. Fall 1993. MR. POTHOLM.

223b,d. African Politics. Fall 1993. MR. POTHOLM.

History

16c,d. Social Change in Africa. Fall 1993. MR. MANCHUELLE.

21c,d. African Identities. Fall 1994. MR. MANCHUELLE.

242c,d. A History of Pan-Africanism. Spring 1994. MR. MANCHUELLE.

263c,d. Francophone Africa. Fall 1993. MR. MANCHUELLE.

268c,d. Politics and History of Northeast Africa: The Latter Colonial to Post-Colonial Period. Fall 1993. MR. SELASSIE.

(Same as **Government 268.**)

333c. Research in Twentieth-Century African-American History. Fall 1993. MR. LEVINE.

Prerequisite: Any course in twentieth-century U.S. history. Preference given to students with previous background in African-American history.

(Same as **Africana Studies 333.**)

360c,d. Problems of Development in Africa. Fall 1993. MR. SELASSIE.

(Same as **Government 360.**)

361c,d. Islam in Africa. Spring 1995. MR. MANCHUELLE.

Sociology

213b. Social Stratification. Spring 1995. MR. ROSSIDES.

215b. Criminology and Criminal Justice. Spring 1994. MR. MCEWEN.

218b. Sociology of Law. Every fall. MR. MCEWEN.

251b. Sociology of Health and Illness. Spring 1994. MS. BELL.

Theater Arts

271c. Topics in Theater: Scenes from the Black Theater. Fall 1993. MS. BURTON.

(Same as **Africana Studies 271.**)

Women's Studies

[**242. Sexuality and Reproduction.**]

Art

Professors

Thomas B. Cornell*

Clifton C. Olds**

Mark C. Wethli, *Director, Studio Art Division*

Associate Professors

Linda J. Docherty, *Chair (spring semester)*

Larry D. Lutchmansingh

John McKee

Susan E. Wegner, *Chair (fall semester)*

Assistant Professor

Ann A. Lofquist

Visiting Assistant Professor

Janet C. Marstine

Visiting Lecturer

Christopher C. Glass

The Department of Art comprises two programs: art history and criticism, and studio art. Majors in the department are expected to elect one of these programs. The major in art history and criticism is devoted primarily to the historical and critical study of the visual arts as an embodiment of some of humanity's highest values and a record of the historical interplay of sensibility, thought, and society. The major in studio art is intended to encourage a sensitive and disciplined aesthetic response to one's culture and personal experiences through the development of perceptual, creative, and critical abilities in visual expression.

Requirements for the Major in Art History and Criticism

The major consists of nine courses, excluding independent study and first-year seminars. Required are **Art 101**; **Art 212** or **226** or a course in classical archaeology; **Art 222**, **232**, **242**, and **252** or **254**; two of **Art 303** through **390**; and one other course chosen from art history courses numbered between 110 and 399. Art history majors are also encouraged to take courses in French and/or German, history, philosophy, religion, and the other arts (literature, music, theater, dance, and the visual arts).

Interdisciplinary Majors

The department participates in interdisciplinary programs in art history and archaeology, and art history and religion. See pages 126–27.

Requirements for the Minor in Art History and Criticism

The minor consists of five courses of which at least three must be at the 200 level and at least one at the 300 level.

The major and the minor in studio art are described on page 45.

COURSES IN THE HISTORY AND CRITICISM OF ART

(For a full description of first-year seminars, see pages 94–100.)

10c. Abstraction and Commodification in Contemporary Art. Fall 1993.
MR. LUTCHMANSINGH.

11c. Painting and Poetry: Greek Mythology. Spring 1994. Ms. WEGNER.

101c. Introduction to Western Art. Fall 1993. Ms. DOCHERTY.

A chronological survey of the art of the Western world (Egypt, the Near East, Europe, and the European-based culture of North America), from the Paleolithic period of prehistoric Europe to the present. Considers the historical context of art and its production, the role of the artist in society, style and the problems of stylistic tradition and innovation, and the major themes and symbols of Western art. Required of majors in art history, majors in studio art, and minors in art history. This course is a prerequisite for most upper-level courses in the history of art.

110c,d. Introduction to East Asian Art. Fall 1993. MR. OLDS.

A chronological survey of Chinese, Korean, and Japanese art from prehistoric times to the present. Considers the painting, sculpture, and architecture of East Asia in the context of historical developments and the major religions of the Orient. (Same as **Asian Studies 110.**)

120c,d. Introduction to South Asian Art. Spring 1994.

MR. LUTCHMANSINGH.

A survey of the architecture, sculpture, and painting of the Indian subcontinent (India, Pakistan, Nepal, Tibet, and Sri Lanka) from prehistoric to early modern times. Major emphasis is placed on the art of the three great ancient traditions of Hinduism, Buddhism, and Jainism; and three special subjects—the development of the Buddha image, the dance of Shiva, and the Hindu temple—are studied in some detail. (Same as **Asian Studies 120.**)

[**204c. History of the Graphic Arts.**]

209c. Introduction to Classical Archaeology: Greece. Fall 1993.

MR. SMITH.

A chronological survey of the archaeology of Greece, from the Neolithic to Alexander the Great. Considers the nature of archaeological evidence, and

the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes architecture, sculpture, vase painting, and the “minor arts.” (Same as **Archaeology 101.**)

210c. Introduction to Classical Archaeology: Rome. Fall 1994.

The archaeology of the Hellenistic kingdoms and Rome, from Alexander the Great to Constantine. First, attempts to define characteristic features of Hellenistic culture, then traces the emergence of a distinctively Roman civilization from both this background and native Italic traditions. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes mural painting, architecture, sculpture, and the “minor arts.” (Same as **Archaeology 102.**)

[211c. The Birth of Greek Art.]

(Same as **Archaeology 307.**)

212c. Medieval Art. Spring 1994. Ms. DOCHERTY.

Key monuments of medieval art are examined in the context of the social and intellectual history of Europe and the Near East. Covers late Roman and early Christian art, and the art of the Byzantine Empire, the Dark Ages, and the Carolingian, Ottonian, Romanesque, and Gothic periods. Special emphasis on the art and architecture of the great medieval abbeys and cathedrals.

Prerequisite: **Art 101** or permission of the instructor.

222c. Art of the Italian Renaissance. Fall 1993. Ms. WEGNER.

A survey of the painting, sculpture, and architecture of Italy in the fourteenth, fifteenth, and sixteenth centuries, with emphasis on major masters: Giotto, Masaccio, Donatello, Brunelleschi, Alberti, Botticelli, da Vinci, Raphael, Titian, and Michelangelo.

Prerequisite: **Art 101** or permission of the instructor.

224c. Mannerism. Fall 1993. Ms. WEGNER.

Mannerism in art and literature. Artists include Michelangelo, Pontormo, Rosso, Bronzino, El Greco. Themes include fantasy and imagination; ideal beauty (male and female); the erotic and grotesque; and the challenging of High Renaissance values. Readings include artists' biographies, scientific writings on the senses, formulas for ideal beauty, and descriptions of court life and manners. The class uses the Bowdoin College Museum of Art's collection of sixteenth-century drawings.

[226c. Northern European Art of the Fifteenth and Sixteenth Centuries.]

[228c. Notions of Renaissance Women.]

232c. Baroque Art. Spring 1994. Ms. WEGNER.

The art of seventeenth-century Europe. Topics include the revolution in painting carried out by Caravaggio, Annibale Carracci, and their followers in Rome; the development of these trends in the works of Rubens, Bernini,

Georges de la Tour, Poussin, and others; and the rise of an independent school of painting in Holland. Connections between art, religious ideas, and political conditions are stressed.

Prerequisite: **Art 101** or permission of the instructor.

242c. European Art of the Nineteenth Century. Spring 1994.

Ms. MARSTINE.

A survey of painting and sculpture in Europe from 1750 to 1900, with emphasis on the art of France, England, and Germany. Individual artists are studied in the context of movements that dominated the century: neoclassicism, romanticism, realism, impressionism, post-impressionism, and symbolism. The discourse of art criticism, the relationship between art and society, and the evolution of the avant-garde in this period are also discussed in detail.

Prerequisite: **Art 101** or permission of the instructor.

[252c. Modern Art.]

254c. Contemporary Art. Fall 1993. MR. LUTCHMANSINGH.

Art of Europe and the Americas since World War II, with emphasis on the New York school. Introductory overview of modernism. Detailed examination of abstract expressionism and minimalist developments; pop, op, kinetic, conceptual, and environmental art; and European abstraction. Concludes with an examination of the international consequences of modernist and contemporary developments, the impact of new electronic and technological media, and the critical debate surrounding the subject of postmodernism.

Prerequisite: **Art 101, 252**, or permission of the instructor.

262c. American Art from Colonial Times to the Civil War. Spring 1994.

Ms. DOCHERTY.

A survey of American architecture, sculpture, and painting from their colonial origins through their development into a distinctive national tradition. Emphasis is placed on understanding American art in its historical context. Readings in primary sources. Field trips to the Bowdoin College Museum of Art and environs of architectural interest.

[264c. American Art from the Civil War to the Present Day.]

[282c. Modern Architecture.]

Seminars in Art History and Criticism

The seminars are intended to utilize the scholarly interests of members of the department and provide an opportunity for advanced work for selected students who have successfully completed enough of the regular courses to possess a background. Admittance to all seminars requires permission of the instructor. The department does not expect to give all, or in some cases any, seminars in each semester. As the seminars are varied, a given topic may be offered only once, or its form changed considerably from time to time.

322c. The Art of Pieter Bruegel and His Contemporaries. Fall 1993.

MR. OLDS.

A study of the paintings, drawings, and prints of Pieter Bruegel the Elder, their relationship to the general history of northern European art, and their influence upon the art of subsequent generations. Among the topics to be considered are the development of landscape painting, the peasant genre, and the social and religious contexts of Bruegel's art.

Prerequisite: **Art 101** or permission of the instructor.

342c. Problems in Photography. Fall 1993. Ms. DOCHERTY.

Examines the history, technique, and theory of photography from its invention to the present day. Issues to be discussed include the legitimization of photography as an art form, the relationship between photography and science, the use of photography as a political tool, and the influence of photography on perceptions of art, society, and nature. Individual research projects center on original photographs in the Bowdoin College Museum of Art.

Prerequisite: **Art 101** or permission of the instructor.

356c. Critical Issues Concerning the Art Museum. Spring 1994.

Ms. MARSTINE.

A study of the complex, often contradictory roles of the art museum in preserving, displaying, educating, and entertaining. Examines the myth of the museum as a neutral environment and the means by which the institution imparts political and cultural values. Explores the ramifications of individual, corporate, and government sponsorship. Particular emphasis is given to acquisitions policies and exhibition strategies.

Prerequisite: **Art 101** or permission of the instructor.

384c. Pop Art and Its Place in Contemporary International Culture.

Spring 1994. MR. LUTCHMANSINGH.

A study of American and international pop art as a site of intersection of a variety of forces—artistic-technical, media-informative, popular-cultural, electronic, commercial, and social, and of its representative function in so-called post-industrial society. Examples are drawn from across the international spectrum, and parallels in the other arts are considered. Major artists to be studied include Rauschenberg, Warhol, Oldenburg, Hamilton, Kitaj, Blake, Rotella, Arman, Gober, Bickerton, Steinbach, and Koons.

Prerequisite: **Art 254** or permission of the instructor.

291c–294c. Intermediate Independent Study in Art History.

ART HISTORY FACULTY.

401c. Advanced Independent Study and Honors in Art History.

ART HISTORY FACULTY.

STUDIO ART

Requirements for the Major in Studio Art

Eleven courses are required in the department, to include **Art 150, 160, 250, and 260**; four other courses in the studio division, at least one of which must be numbered **270** or higher; **Art 101**; and two other courses in art history. Students undertaking an honors project in their senior year will be required to take **Art 401** in addition to the eleven courses required of the major.

Requirements for the Minor in Studio Art

The minor consists of six courses: **Art 101, 150, 160**, either **250** or **260**, plus two additional studio courses, at least one of which must be numbered **270** or higher.

Studio courses without prerequisite are frequently oversubscribed; preference in enrollment is then given to first- and second-year students as well as to juniors and seniors fulfilling requirements of the studio major or minor.

150c. Drawing I. Fall 1993. Spring 1994. Ms. LOFQUIST.

An introduction to drawing, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects entail objective observation and analysis of still-life, landscape, and figurative subjects; exploration of the abstract formal organization of graphic expression; and the development of a critical vocabulary of visual principles. Lectures and group critiques augment studio projects in various drawing media.

Enrollment limited to 25 students.

160c. Painting I. Fall 1993. Spring 1994. MR. WETHLI.

An introduction to painting, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects entail objective observation and analysis of still-life, landscape, and figurative subjects; exploration of the painting medium and chromatic structure in representation; and the development of a critical vocabulary of painting concepts. Lectures and group critiques augment studio projects in painting media.

Prerequisite: **Art 150**. Enrollment limited to 25 students.

170c. Printmaking I. Fall 1993. MR. WETHLI.

An introduction to intaglio printmaking, including etching, drypoint, engraving, monotype, and related methods. Studio projects develop creative approaches to perceptual experience and visual expression that are uniquely inspired by the intaglio medium. Attention is also given to historical and contemporary examples and uses of the medium.

Prerequisite: **Art 150** or permission of the instructor. Enrollment limited to 20 students.

180c. Photography I. Spring 1994. MR. MCKEE.

Photographic visualization and composition as consequences of fundamental techniques of black-and-white still photography. Class discussions and demonstrations, examination of masterworks, and field and laboratory work in 35mm format. Students must provide their own 35mm nonautomatic camera.

Enrollment limited to 32 students.

190c. Architectural Design I. Spring 1994. MR. GLASS.

An introduction to architectural design. Studio projects develop skills in program and context analysis, conceptual design principles and processes, and presentation techniques.

Enrollment limited to 25 students.

250c. Drawing II. Spring 1994. MR. CORNELL.

A continuation of the principles introduced in **Art 150**, with particular emphasis on figurative drawing. Studio projects develop perceptual, creative, and critical abilities through problems involving objective observation, gestural expression and structural principles of the human form, studies from historical and contemporary examples, and exploration of the abstract formal elements of drawing. Lectures and group critiques augment studio projects in various drawing media.

Prerequisite: **Art 150**.

260c. Painting II. Spring 1994. MR. CORNELL.

A continuation of the principles introduced in **Art 160**, with studio problems based on direct experience.

Prerequisite: **Art 160**.

270c. Printmaking II. Spring 1994. MR. CORNELL.

A continuation of the principles introduced in **Art 170**, with particular emphasis on independent projects.

Prerequisite: **Art 170** or permission of the instructor.

280c. Photography II. Fall 1993. MR. MCKEE.

Review of the conceptual and technical fundamentals of black-and-white photography and exploration of the different image-making possibilities inherent in related photographic media such as 35mm and view cameras. Seminar discussions and field and laboratory work. Students must provide their own nonautomatic 35mm camera.

Prerequisite: **Art 180** or permission of the instructor.

295c–299c. Intermediate Independent Study in Studio Art.

STUDIO ART FACULTY.

350c–359c. Advanced Studies in Studio Art. Spring 1994. MS. LOFQUIST.

A continuation of principles introduced in lower division drawing and painting courses, with increasing emphasis on independent projects.

Prerequisite: **Art 250** or **Art 260** or permission of the instructor.

370c. Printmaking III. Spring 1994. MR. CORNELL.

Advanced projects in printmaking.

Prerequisite: **Art 270** or permission of the instructor.

401c. Advanced Independent Study and Honors in Studio Art.

STUDIO ART FACULTY.

Open only to exceptionally qualified senior majors and required for honors credit. Advanced studio projects undertaken on an independent basis, with assigned readings, critical discussions, and a final position paper.

Asian Studies

Administered by the Committee on Asian Studies

Kidder Smith, *Program Director*

Assistant Professor

Xiaohong Wen

Lecturer

Takahiko Hayashi

Visiting Lecturer

Takako Ishida

Students in Asian studies focus on the cultural traditions of either East Asia (China and Japan) or South Asia (India and Sri Lanka). In completing the major, each student is required to gain a general understanding of both culture areas, to acquire a working proficiency in one of the languages of South or East Asia, to develop a theoretical or methodological sophistication in one of the disciplines constitutive of Asian studies (e.g., history, religion, literature, anthropology, etc.), and to demonstrate a degree of applied specialization. These principles are reflected in the requirements for an Asian studies major. Student-designed majors focusing on cross-cultural topics in the humanities and/or social sciences are also encouraged. Normally, such student-designed majors will contain a strong disciplinary grounding (e.g., four courses in economics), as well as a significant number of relevant courses focused on Asia.

Off-Campus Study

Foreign study for students interested in Asian studies is highly recommended. Established programs in the People's Republic of China, Hong Kong, Taiwan, and Japan are available for students interested in East Asia. The ISLE and SITA programs (see page 33) are recommended for students interested in South Asia. Consult the Asian studies office for information about these and other programs.

Requirements for the Major in Asian Studies

One can major in Asian studies by focusing on a particular academic discipline (e.g., religion) or by focusing on a particular geographic and cultural area (e.g., South Asia). In both cases, eight courses are required in addition to the study of an Asian language. These eight include **Asian Studies 101**, a senior seminar, and other courses as described below. A

student who wishes to graduate with honors in the program must also write an honors thesis, which is normally a one-semester project.

The major requires courses from four categories:

1. *Language.* Two years of an East Asian language or one year of a South Asian language, or the equivalent through intensive language study.*

2a. *Discipline-specific courses.* Four courses from a single discipline, one of which is normally a senior seminar. Currently, students may elect anthropology, history, literature, or religion;

or

2b. *Area-specific courses.* Four courses that focus on the student's area of specialization, two in one discipline and two in another. One of these is normally a senior seminar. The possible areas of specialization are Japan, China, and South Asia.

3. Two courses that include a geographic area other than that of one's language concentration. One of these must be **Asian Studies 101**.

4. Two other courses to be chosen in consultation with the student's advisor. If the student has elected a disciplinary track in anthropology or religion, one of these may be **Anthropology 101** or **Religion 101**.

Requirements for the Minor in Asian Studies

Students focus on the cultural traditions of either East Asia or South Asia by completing: (1) **Asian Studies 101**; (2) a concentration of at least three courses in one academic discipline or geographic area; and (3) one elective in Asian studies.

Program Honors

Students contemplating honors candidacy in the program must have established records of B/Honors and A/High Honors in program course offerings and present clearly articulated, well-focused proposals for scholarly research. Students must prepare an honors thesis and are examined orally by the program faculty.

First-Year Seminars in Asian Studies

For a full description of first-year seminars, see pages 94–100.

19b,d. Women's Lives in South Asia. Spring 1994. Ms. DICKEY.

(Same as **Anthropology 19**.)

23c,d. The First Emperor. Spring 1995. MR. SMITH.

(Same as **History 23**.)

*After 1993–94, the College will not offer courses in any South Asian language. Arrangements may be made with the director of the program to transfer credits from another institution.

Introductory, Intermediate, and Advanced Courses**101c,d. Asian Civilizations.** Fall 1993. MR. SMITH. Spring 1994.

MS. SOIFER.

Readings in original texts from India, China, and Japan provide the basis for an exploration of basic patterns of thought and cultural expression in South and East Asia. (*Fall 1993*: Same as **History 103**. *Spring 1994*: Same as **Religion 102**.)

110c,d. Introduction to East Asian Art. Fall 1993. MR. OLDS.

A chronological survey of Chinese, Korean, and Japanese art from prehistoric times to the present. Considers the painting, sculpture, and architecture of East Asia in the context of historical developments and major religions of the Orient. (Same as **Art 110**.)

120c,d. Introduction to South Asian Art. Spring 1994.

MR. LUTCHMANSINGH.

A survey of the architecture, sculpture, and painting of the Indian subcontinent (India, Pakistan, Nepal, Tibet, and Sri Lanka) from prehistoric to early modern times. Major emphasis is placed upon the art of the three great ancient traditions of Hinduism, Buddhism, and Jainism; and three special subjects—the development of the Buddha image, the dance of Shiva, and the Hindu temple—are studied in some detail. (Same as **Art 120**.)

235b,d. South Asian Cultures and Societies. Fall 1994. MS. DICKEY.

An introduction to cultures and societies of South Asia, including India, Nepal, Pakistan, Bangladesh, and Sri Lanka. Issues of religion, family and gender, caste, and class are examined through ethnographies, novels, and films. (Same as **Anthropology 235**.)

Prerequisite: Previous course in sociology, anthropology, or Asian studies, or permission of the instructor.

236b,d. Political Identity and Leadership in South Asia. Spring 1995.

MS. DICKEY.

In South Asia, political identity is often based on “primordial” ties such as caste, religion, ethnicity, language, and region. Political leadership involves various strategies for addressing and transcending these communal interests. This course examines the development of different political identities and the importance of issues such as personality politics and patronage in electoral leadership in several South Asian countries. (Same as **Anthropology 236**.)

Prerequisite: Previous course in anthropology, sociology, or Asian studies.

[240c,d. Religion in Ancient India.](Same as **Religion 220**.)**[241c,d. Religion in Medieval and Modern India.]**(Same as **Religion 221**.)

242c,d. Buddhist Thought. Fall 1993. MR. DHARMASIRI.

Examines principal categories of Buddhist religious thought as they arise in representative genres of Buddhist literature, especially the Sanskrit *Sutras* of Mahayana tradition. (Same as **Religion 222.**)

Prerequisite: **Religion 101** or **102**, or permission of the instructor.

[243c,d. Buddhism, Culture, and Society.]

(Same as **Religion 223.**)

244c,d. Taoism and Tantra. Fall 1993. MR. DHARMASIRI.

An introduction to the basic principles of religious thought articulated in the fundamental texts (*Tao Te Ching* and *Chuang Tzu*) of earlier philosophical Taoism in China, a consideration of later forms of religious Taoism, and an examination of comparable principles in Buddhist tantric traditions (*Vimalakirti*, *Hevajra Tantra*, *The Tibetan Book of the Dead*, and *Dzog Chen*). Readings from primary sources and modern interpretations. (Same as **Religion 224.**)

Prerequisite: **Asian Studies 101/Religion 102** or permission of the instructor.

245c,d. Buddhist Ethics. Spring 1994. MR. DHARMASIRI.

An exploration of Theravada and Mahayana religious worldviews with an emphasis on the nature of ethical action. Themes to be explored include the fundamental Buddhist theory of action (*karma*), rebirth, intention, love, altruism, equality, monastic moral discipline, mindfulness, evil, emptiness, and selflessness. (Same as **Religion 225.**)

Prerequisite: **Asian Studies 101/Religion 102** or permission of the instructor.

247c,d. Philosophy of Religion. Spring 1994. MR. DHARMASIRI.

A critical examination of fundamental themes (types of religious experience, mysticisms, gods, etc.) central to a comparative understanding of religion derived from a reading of contemporary philosophers of religion, especially the work of Ninian Smart. Considerations chiefly drawn from Buddhist and Christian traditions. (Same as **Religion 254.**)

Prerequisite: **Asian Studies 101/Religion 102** or permission of the instructor.

258b,d. Ethnicity and Politics in South Asia. Spring 1994. MS. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect the political processes in India, Pakistan, Bangladesh, and Sri Lanka. (Same as **Government 227.**)

270c,d. Chinese Thought in the Classical Period. Spring 1994.

MR. SMITH.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. (Same as **History 270.**)

271c,d. The Material Culture of Ancient China. Fall 1995. MR. SMITH.

Addresses material culture in China from ca. 400 to 100 B.C., while the great unification of empire was occurring. Topics include what people ate; how they wrote, fought, and built; how we know such things about them; and how this civilization can be compared with others. (Same as **History 271.**)

274c,d. Chinese Society in the Ch'ing. Spring 1995. MR. SMITH.

An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644–1911). Discussion of societal relations, state organization, and ideology. Culminates in a day-long simulation of elite society in the eighteenth century. (Same as **History 274.**)

275c,d. Modern Chinese History. Fall 1994. MR. SMITH.

An introduction to the history of China from 1840 to the present. Studies the confrontation with Western imperialism, the fall of empire, the Republican period, and the People's Republic. (Same as **History 275.**)

[**276b,d. Chinese Politics.**]

(Same as **Government 281.**)

[**277b,d. Chinese Foreign Policy.**]

(Same as **Government 284.**)

278c,d. The Foundations of Tokugawa Japan. Spring 1996. MR. SMITH.

Addresses problems in the creation and early development of the Tokugawa (1600–1868) state and society, including the transformation of samurai from professional warriors into professional bureaucrats and the unanticipated growth of a quasi-autonomous urban culture. (Same as **History 278.**)

370c,d. Problems in Chinese History. Every fall. MR. SMITH.

Reviews the whole of Chinese history. Students develop their research skills and write a substantial research paper. (Same as **History 370.**)

290c. Intermediate Independent Study.

400c. 401c. Advanced Independent Study and Honors.

LANGUAGE COURSES

Chinese 101c. Beginning Chinese I. Every fall. MS. WEN.

An introduction to Putonghua (Mandarin) and the written language. Five hours of class per week, plus assigned language laboratory.

Chinese 102c. Beginning Chinese II. Every spring. MS. WEN.

A continuation of **Chinese 101.**

Chinese 203c. Intermediate Chinese I. Every fall. MS. WEN.

A continuation of **Chinese 102.** Five hours of class per week, plus assigned language laboratory.

Chinese 204c. Intermediate Chinese II. Every spring. MS. WEN.

A continuation of **Chinese 203.**

[Chinese 307c, 308c. Introduction to Classical Chinese I and II.]

Japanese 101c. Beginning Japanese I. Every fall. MR. HAYASHI.

An introduction to standard modern Japanese. Five hours per week, plus assigned language laboratory.

Japanese 102c. Beginning Japanese II. Every spring. MR. HAYASHI.

A continuation of Japanese 101.

Japanese 203c. Intermediate Japanese I. Every fall. MR. HAYASHI.

A continuation of Japanese 102. Five hours per week, plus assigned language laboratory.

Japanese 204c. Intermediate Japanese II. Every spring. MR. HAYASHI.

A continuation of Japanese 203.

Japanese 205c. Intermediate Japanese III. Fall 1992. Ms. ISHIDA.

Third year of modern Japanese. Grammar review and readings in newspapers and contemporary literature. Frequent writing of short essays. Maintenance of aural/oral proficiency.

Japanese 206c. Intermediate Japanese IV. Spring 1993. Ms. ISHIDA.

A continuation of Japanese 205.

Biochemistry

Administered by the Committee on Biochemistry

Professors

John L. Howland

David S. Page

William L. Steinhart, *Committee Chair*

Associate Professor

C. Thomas Settlemyre

Requirements for the Major in Biochemistry

All majors must complete the following courses: **Biology 104, Biology (Chemistry) 261, 262; Chemistry 109, 225, 226, 251; Mathematics 161, 171; and Physics 103.** Students should normally complete the required biochemistry core courses by the end of their junior year. Majors must complete three courses from the following: **Biology 111, 112, 114, 117, 118, 207, 304, 307, 309, 400; Chemistry 210, 240, 252, 270, 330, 400; Physics 223, 227, 228, 260, 400.** Students may include as electives up to two 400 courses. Those planning to engage in independent study in biochemistry should complete at least one of the following courses: **Biology 112, 118, 212; Chemistry 210, 240, 254.** Students taking independent study courses for the biochemistry major should register for **Biochemistry 401, 402, etc.**

Biology

Professors

John L. Howland
William L. Steinhart

Associate Professors

Patsy S. Dickinson
Carey R. Phillips
C. Thomas Settlemire, *Chair*
Nathaniel T. Wheelwright

Assistant Professor

Amy S. Johnson

Laboratory Instructors

Pamela J. Bryer
Alan Garfield
Stephen Hauptman

Requirements for the Major in Biology

The major consists of seven courses in the department exclusive of independent study and courses below the 100 level. Majors are required to complete **Biology 104**, four core courses, and two other courses within the department, one of which must be at the 200 level or above. Core courses are divided into three groups. One course must be taken from each group. The fourth core course may be from any group.

Group 1

Genetics and Molecular
Biology
Microbiology
Development
Biochemistry I

Group 2

Comparative Physiology
Plant Physiology
Development

Group 3

Ecology
Biology of Marine Organisms

In addition, majors must complete **Mathematics 161**, **Physics 103**, and **Chemistry 225**. Students are advised to complete **Biology 104** and the mathematics, physics, and chemistry courses by the end of the sophomore year. Students planning postgraduate education in science or the health professions should note that graduate and professional schools are likely to have additional admissions requirements in mathematics, physics, and chemistry.

Interdisciplinary Major

The department participates in interdisciplinary programs in biochemistry and neuroscience. See pages 52 and 140–41.

Requirements for the Minor in Biology

The minor consists of four courses within the department at the 100 level or above, appropriate to the major.

[11a. Ancient Biology and Medicine.]

51a. The Science of Nutrition. Fall 1993. MR. SETTLEMIRE.

The fundamentals of the science of nutrition. Topics include the chemical and biological features of the basic nutrients, the physiology of nutrient uptake and utilization, and changing nutritional needs from infancy to old

age. Approximately one-third of the class time is devoted to student presentations on such topics as the vegetarian diet, the cholesterol controversy, global food problems, and food preservatives. Lecture and weekly laboratory/discussion groups. Enrollment limited to 50 students.

52a. Horticulture. Spring 1995. MR. STEINHART.

An introduction to ornamental horticulture and the cultivated plants of agriculture. Topics include plant physiology, anatomy, and taxonomy relevant to horticulture; the effects of environmental factors on plant growth; cultivation and propagation of plants; the origins of crop plants; plant pests and diseases; and landscape and greenhouse design. Topics in economic botany and ethnobotany include plant sources of structural materials, fibers, dyes, drugs, and spices. Three hours of lecture/demonstration each week, plus occasional laboratory meetings or field trips.

53a. Sexuality and Human Reproduction: Biological and Sociological Perspectives. Fall 1993. MS. DICKINSON, MS. BELL, AND MR. PHILLIPS.

Examines human reproduction, sexuality, and in-utero embryonic development from biological, clinical, and social perspectives. Topics include the effects of social and political pressures on reproductive research, the social consequences of reproductive research, and medical treatment of the reproductive process. Students participate in debate/discussion sessions associated with course topics. Enrollment limited to 40 students. (Same as **Sociology 53.**)

54a. Concepts in Ecology and Evolutionary Biology. Every other spring. Spring 1994. MR. WHEELWRIGHT.

An overview of evolution, the unifying concept in biology, and an application of evolutionary and ecological principles to environmental problems. Lectures deal with evolutionary patterns, emphasizing the mechanisms of natural and sexual selection. Ecological concepts relating to the conservation of biodiversity are discussed, with a focus on tropical ecosystems. Field trips illustrate ecological concepts and introduce students to the natural history of Maine. Optional field trip to the Bowdoin Scientific Station on Kent Island. Designed for nonmajors; not open to students who have taken Biology 101, 102, or 104. Enrollment limited to 45 students.

56a. The Art and Science of the Living Cell. Spring 1994. MR. PHILLIPS.

An overview of the different parts of a cell and how these parts function as components of the cell. Students use art and written description as means of communicating the function of cells and how cells are integrated into tissues. Two hours of laboratory work each week. Designed for nonmajors. Enrollment limited to 30 students.

99a. Introduction to Microbiology. Fall 1993. MR. HOWLAND.

Examines the biology of bacteria and their viruses. Intended as an introduction to biology for students who need further training in science

before beginning Biology 104. Three hours per week, divided roughly equally between class discussion and laboratory sessions.

Admission on the basis of placement exam.

104a. Introductory Biology. Every spring. THE DEPARTMENT.

Examines fundamental biological principles extending from the subcellular to the population level of living organisms. Topics include bioenergetics, structure-function relationships, cellular information systems, ecology, and evolutionary theory. Lecture and weekly laboratory/discussion groups.

111a. Plant Physiology. Fall 1993. MR. STEINHART.

Topics include the nature and control of growth and differentiation, nutrition, water and nutrient translocation, metabolism, hormone physiology, and physiological ecology of plants. Laboratory work stresses the association of structure and function in tissues and organs of higher plants, and includes self-designed projects. Lectures and three hours of laboratory per week.

Prerequisite: **Biology 102 or 104.**

112a. Genetics and Molecular Biology. Every spring. MR. STEINHART.

Integrated coverage of organismic and molecular levels of the genetics of eucaryotes and procaryotes. Topics include the structure and function of chromosomes, the mechanisms and control of gene expression, recombination, mutagenesis, the determination of gene order and sequence, and genetic engineering applications. Occasional problem-solving sessions and laboratory are scheduled.

Prerequisite: **Biology 101 or 104.**

114a. Comparative Physiology. Every spring. MS. DICKINSON.

The relationship between structure and function in organ systems and in invertebrates and vertebrates as a whole. The interdependency of organ systems is considered. Lectures and four hours of laboratory work or conferences per week.

Prerequisite: **Biology 102 or 104.**

115a. Ecology. Every fall. MR. WHEELWRIGHT.

Principles concerning the interactions between organisms and their environment. Topics include population growth and structure, processes of speciation, succession, energy flow, biogeochemical cycling, and the influence of competition, predation, and other factors on the behavior, abundance, and distribution of plants and animals. Laboratory sessions, field trips, and group research projects emphasize the natural history of local plants and animals (both marine and terrestrial) and their interactions. Optional field trip to the Bowdoin Scientific Station on Kent Island.

Prerequisite: **Biology 102 or 104.**

117a. Developmental Biology. Every fall. MR. PHILLIPS.

An examination of current concepts of embryonic development, with emphasis on their experimental basis. Topics include morphogenesis and functional differentiation, tissue interaction, nucleocytoplasmic interaction, differential gene expression, and interaction of cells with hormones and extracellular matrix. Project-oriented laboratory work emphasizes experimental methods. Lectures and three hours of laboratory per week.

Prerequisite: **Biology 102 or 104.**

118a. Microbiology. Every spring. Spring 1994. MR. SETTLEMIRE.

An examination of the structure and function of microorganisms, primarily bacteria, with a major emphasis on molecular descriptions. Subjects covered include structure, metabolism, mechanism of action of antibiotics, and basic virology. Lecture and laboratory/discussion sessions.

Prerequisites: **Biology 102 or 104, and Chemistry 225.**

119a. Biology of Marine Organisms. Every fall. Fall 1993. MS. JOHNSON.

The study of the biology and ecology of marine mammals, seabirds, fish, intertidal and subtidal invertebrates, algae, and plankton. Also considers the biogeographic consequences of global and local ocean currents on the evolution and ecology of marine organisms. Laboratories, field trips, and group research projects emphasize natural history, functional morphology, and ecology. Lectures and three hours of laboratory or field trip per week. One weekend field trip included.

Prerequisite: **Biology 102 or 104.**

156a. Marine Ecology. Fall 1993. MR. GILFILLAN.

The relationships between organisms and their environment are considered in the context of animals and plants living in the sea. The concept of marine communities living in dynamic equilibrium with their physical-chemical environment is introduced, and the influences of human activities on the ecology of marine organisms is explored. (Same as **Environmental Studies 200.**)

Prerequisite: A college-level science course or permission of the instructor.

160a. Evolution of Invertebrates. Every other spring. Spring 1994.

MS. JOHNSON.

Principles of evolution are studied through a phylogenetic, functional, and morphological examination of marine invertebrates. Living representatives of all major marine invertebrate phyla are observed. Information from the fossil record is used to elucidate causes and patterns of evolution. Lectures, three hours of laboratory or field work per week, and an individual research project are required.

Prerequisite: **Biology 102 or 104.**

203a. Comparative Neurobiology. Fall 1994. MS. DICKINSON.

A comparative study of the function of the nervous system in invertebrate and vertebrate animals. Topics include the physiology of individual nerve

cells and their organization into larger functional units, the behavioral responses of animals to cues from the environment, and the neural mechanisms underlying such behaviors. Lectures and four hours of laboratory work per week.

Prerequisite: **Biology 102** or **104**. **Biology 114** is recommended.

204a. Biomechanics. Spring 1995. Ms. JOHNSON.

Examines the quantitative and qualitative characterization of organismal morphology, and explores the relationship of morphology to measurable components of an organism's mechanical, hydrodynamic, and ecological environment. Lectures, labs, field trips, and individual research projects emphasize (1) analysis of morphology, including analyses of the shape of individual organisms as well as of the mechanical and molecular organization of their tissues; (2) characterization of water flow associated with organisms; and (3) analyses of the ecological and mechanical consequences to organisms of their interaction with their environment.

Prerequisite: **Biology 102** or **104**. Introductory physics and calculus are strongly recommended.

[**206a. Cell Physiology.**]

207a. Immunology. Fall 1994. MR. SETTLEMIRE.

Covers the development of the immune response, the cellular physiology of the immune system, the nature of antigens, antibodies, B and T cells, and the complement system. The nature of natural immunity, transplantation immunology, and tumor immunology are also considered. Lecture and laboratory/discussion sessions.

Prerequisite: **Biology 102** or **104**.

208a. Ornithology. Every other spring. Spring 1995. MR. WHEELWRIGHT.

Advanced study of the biology of birds, including anatomy, physiology, distribution, and systematics, with an emphasis on avian ecology and evolution. Through integrated laboratory sessions, field trips, discussion of the primary literature, and independent research, students learn identification of birds, functional morphology, and research techniques such as experimental design, behavioral observation, and field methods. Optional field trip to the Bowdoin Scientific Station on Kent Island.

Prerequisites: **Biology 115** or permission of the instructor.

212a. Laboratory in Molecular Biology and Biochemistry. Every spring. MR. HOWLAND.

Experiments employing contemporary techniques in molecular biology and biochemistry. Emphasis on isolation and physical properties of nucleic acids, isolation and kinetics of enzymes, and composition and activities of biological membranes. Techniques studied and used include radioisotopes, spectrophotometry, electrophoresis, chromatography, scanning electron microscopy, and the use of microcomputers. This course is a logical precursor

to independent study in the areas of molecular biology and biochemistry.

Prerequisites: Two from **Biology 112, 113, 118, 201, 261, or 262.**

220a. Evolutionary Ecology. Spring 1994. MR. WHEELWRIGHT.

An exploration of concepts and controversies in modern evolutionary ecology. Topics include evolution of life histories, mechanisms of evolutionary change (natural selection, genetic drift, gene flow, mutation), the fossil record, systematics, and human evolution. Concepts are illustrated through readings of classic and contemporary papers in the primary literature, student-led discussions, analyses of models of population genetics, and occasional field trips, including an optional trip to the Bowdoin Scientific Station on Kent Island.

Prerequisite: **Biology 115.**

261a. Biochemistry I. Every fall. MR. HOWLAND.

Proteins and enzymes. An introduction to the chemistry and biology of small biological molecules, macromolecules, and membranes. Emphasis on kinetics and mechanisms of enzymic reactions and upon equilibrium and non-equilibrium thermodynamics underlying biological processes. Lectures and informally scheduled laboratories, based upon computer models of biochemical reactions and metabolic networks. (Same as **Chemistry 261.**)

Prerequisite: **Chemistry 226.**

262a. Biochemistry II. Every spring. MR. PAGE.

(See **Chemistry 262**, page 62.)

290a. Intermediate Independent Study. THE DEPARTMENT.

301a. Seminar in Cell Motility. Fall 1993. THE DEPARTMENT.

Presents the current understanding of how energy is converted into movement at the cellular level. Such movements as muscle contraction and mitosis are examined. In preparing original research papers, students learn about the two major eukaryotic motility systems: microtubule-based motility and microfilament-based motility. In addition, the actual molecular motor proteins, myosin, dynein, and kinesin, along with their multigene families, are studied. Students are exposed to the biochemistry of the conversion of energy into movement, along with the cell biology of movement in cells and the molecular genetics of the various motility systems.

304a. Topics in Biochemistry and Molecular Biology. Spring 1994.

MR. HOWLAND.

A seminar that deals, at different times, with such topics as biological energetics, membrane biochemistry, medical genetics, the molecular biology of development, and plant molecular biology.

305a. Neuroethology. Fall 1993. MS. DICKINSON.

A study of the neuronal control of behavior, emphasizing the roles of specific neuronal properties and interactions in sensory processing, controlling motor output, and learning. Students read and discuss original journal

articles and conduct laboratory projects on the control of relatively simple behaviors.

Prerequisite: **Biology 114, Biology 203, or Psychobiology 265**, or permission of the instructor.

307a. Advanced Molecular Genetics. Fall 1994. MR. STEINHART.

A seminar focusing on the application of the methods of contemporary molecular genetics and biotechnology to fundamental problems of plant and animal biology. Topics include cellular differentiation, hormonal regulation, responses to environmental stress and disease, cell transformation, agricultural and medical applications of genetic engineering, and new approaches in population and human genetics. Reading and discussion of articles from the primary literature.

Prerequisite: **Biology 112 or 113.**

309a. Biochemical Endocrinology. Fall 1993. MR. SETTLEMIRE.

A study of how the endocrine system is involved in the regulation of metabolism and development, with an emphasis on the biochemical mechanisms. The processes involved in the production and release of the hormones are also examined.

Prerequisite: **Biology 261** or permission of the instructor.

310a. Advanced Developmental Biology. Spring 1994. MR. PHILLIPS.

The study of the principles and processes of embryonic and post-embryonic animal development, stressing mechanisms of cell and tissue interaction and morphogenesis. Students read original journal articles and participate in discussions. Laboratory projects include the use of the scanning electron microscope to study a specific developmental question.

Prerequisites: **Biology 116 or 117** and permission of the instructor.

400a. Independent Study and Honors. THE DEPARTMENT.

Chemistry

Professors

Samuel S. Butcher

Ronald L. Christensen,

Chair

Jeffrey K. Nagle†

David S. Page

Adjunct Professor

Edward S. Gilfillan

Assistant Professors

Richard D. Broene

Elizabeth A. Stemmler

Visiting Instructor

Christine A. Blaine

Director of Laboratories

Judith C. Foster

Laboratory Support Manager

Rene L. Bernier

Laboratory Instructors

Beverly G. DeCoster

Paulette M. Fickett

Colleen T. McKenna

Joint Appointment with Biology

Assoc. Prof. C. Thomas Settlemire

Courses at the 50 level are introductory, do not have prerequisites, and are appropriate for nonmajors. Courses at the 100 level are introductory without formal prerequisites and lead to advanced-level work in the department.

Courses 200 through 259 are at the second level of work and generally require only the introductory courses as prerequisites. Courses 260 through 290 are normally taken in the junior year and have two or more courses as prerequisites. Courses 300 through 390 normally are taken in the junior or senior year and have two or more courses as prerequisites.

Requirements for the Major in Chemistry

The required courses are **Chemistry 109, 210, 225, 226, 240, 251, 252, 254**, and any two courses at the 300 level or above. Students with high school backgrounds in chemistry are expected to begin with **Chemistry 109**. **Chemistry 101** is an introductory course for students with little or no prior experience with chemistry. In addition to these chemistry courses, chemistry majors also are required to take **Physics 103** and **Mathematics 161** and **171**.

Because the department offers programs based on the interests and goals of the student, a prospective major is encouraged to discuss his or her plans with the department as soon as possible. The chemistry major can serve as preparation for many career paths after college, including the profession of chemistry, graduate studies in other branches of science, medicine, secondary school teaching, and many fields in the business world. Advanced electives in chemistry (**Chemistry 310** and **340**), along with additional courses in mathematics and physics, also allow students to meet the formal requirements of the American Chemical Society–approved chemistry major. Students interested in this program also should consult with the department as soon as possible.

The department encourages its students to round out the chemistry major with relevant courses in other departments, depending on individual needs. These might include electives in other departments that provide extensive opportunities for writing and speaking, or courses concerned with technology and society, to name a few areas. Students interested in providing a particular interdisciplinary emphasis to their chemistry major should consider additional courses in biology and biochemistry, computer science, economics, education, geology, mathematics, or physics.

Independent Study

A student wishing to conduct a laboratory independent study project (**Chemistry 400**) must have taken at least one of the following courses: **Chemistry 254, Biology 211, or Biology 212**.

Interdisciplinary Majors

The department participates in interdisciplinary programs in biochemistry, chemical physics, and geology and chemistry. See pages 52 and 127.

Requirements for the Minor in Chemistry

The minor consists of five chemistry courses appropriate to the major.

50a. Topics in Chemistry: Global Change. Spring 1994. MR. BUTCHER.

An examination of the ways in which cultural and natural forces are changing our environment. Selected principles of science are developed in the context of examining how science works, properties of the Earth system, and the nature of global change. The course presumes no background in science and is not open to students who have had a college-level chemistry course.

101a. Introductory Chemistry. Every spring. MS. STEMMLER.

Designed for students with no prior experience in chemistry. An introduction to the states of matter and their properties; the mole concept and stoichiometry; selected properties of the elements. Lectures, conferences, and three hours of laboratory work per week.

109a. General Chemistry. Every fall. MR. BUTCHER AND MR. CHRISTENSEN.

Introduction to models for chemical bonding and intermolecular forces; characterization of systems at equilibrium and spontaneous processes, including oxidation and reduction; rates of chemical reactions. Lectures, conferences, and three hours of laboratory work per week.

Prerequisite: A secondary school course in chemistry or **Chemistry 101**.

210a. Quantitative Analysis. Fall 1993. MS. STEMMLER.

Methods of separating and quantifying inorganic and organic compounds using volumetric, spectrophotometric, electrometric, and gravimetric techniques are covered. Fundamentals of gas and liquid chromatography and the statistical analysis of data are addressed. Lectures and four hours of laboratory work per week.

Prerequisite: **Chemistry 109** (or **Chemistry 102** for those students who matriculated before 1992.)

225a. Elementary Organic Chemistry. Every spring. MR. BROENE.

An introduction to the chemistry of the compounds of carbon. Provides the foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work per week.

Prerequisite: **Chemistry 109**.

226a. Organic Chemistry. Every fall. MR. PAGE.

A continuation of the study of the compounds of carbon. **Chemistry 225** and **226** cover the material of the usual course in organic chemistry and form a foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work per week.

Prerequisite: **Chemistry 225**.

[230a–239a. Intermediate Topics in Chemistry.]

240a. Inorganic Chemistry. Spring 1994. Ms. BLAINE.

An introduction to the chemistry of the elements. Chemical bonding and its relationship to the properties and reactivities of coordination compounds, organometallic compounds, and covalent and ionic solids are emphasized. Topics in bioinorganic and environmental inorganic chemistry are included. Provides the foundation for further work in inorganic chemistry and biochemistry. Lectures and four hours of laboratory work per week.

Prerequisites: **Chemistry 102** or **109**.

251a. Physical Chemistry I. Every fall. MR. BUTCHER.

Thermodynamics and its application to chemical changes and equilibria that occur in the gaseous, solid, and liquid states. The behavior of systems at equilibrium and chemical kinetics are related to molecular properties by means of the kinetic theory of gases.

Prerequisites: Chemistry 102 or 109, Physics 103, Mathematics 171, or permission of the instructor. **Mathematics 181** recommended.

252a. Physical Chemistry II. Every spring. MR. CHRISTENSEN.

Development and principles of quantum mechanics with applications to atomic structure, chemical bonding, chemical reactivity, and molecular spectroscopy.

Prerequisite: **Chemistry 251** or permission of the instructor. **Mathematics 181** recommended.

254a. Physical Chemistry Laboratory. Every spring. MR. CHRISTENSEN.

Experiments in thermodynamics, kinetics, spectroscopy, and quantum chemistry. Modern experimental methods, including digital electronics, computer-based data acquisition, and the use of pulsed and continuous lasers, are used to verify and explore fundamental concepts of physical chemistry. Emphasis on a modular approach to experimental design and the development of scientific writing skills. Lectures and four hours of laboratory work per week.

Prerequisites: **Chemistry 251** and **252** (generally taken concurrently).

261a. Biochemistry I. Every fall. MR. HOWLAND.

(See **Biology 261**, page 58.)

262a. Biochemistry II. Every spring. MR. PAGE.

An introduction to metabolism. Topics include pathways in living cells by which carbohydrates, lipids, amino acids, and other important biomolecules are broken down to produce energy and biosynthesized. (Same as **Biology 262**.)

Prerequisite: **Chemistry 226** and **Biology/Chemistry 261**.

270a. Molecular Structure Determination in Organic Chemistry.

Fall 1993. MR. BROENE.

Theory and applications of spectroscopic techniques useful for the determination of organic structures. Mass spectrometry and infrared, ultraviolet-

visible, and nuclear magnetic resonance (NMR) spectroscopy are discussed. Heavy emphasis is placed on applications of multiple-pulse Fourier transform NMR spectroscopic techniques. Lectures and up to two hours of laboratory work per week.

Prerequisite: **Chemistry 226**.

310a. Instrumental Analysis. Spring 1994. Ms. STEMMLER.

Theoretical and practical aspects of instrumental techniques such as nuclear magnetic resonance, infrared, Raman, X-ray fluorescence, and mass spectrometry are covered, in conjunction with advanced chromatographic methods. Signal processing, correlation techniques, and computer interfacing are explored. Lectures and four hours of laboratory work per week.

Prerequisites: **Chemistry 210** and **254**, or permission of the instructor.

[**320a. Advanced Organic Chemistry.**]

330a–339a. Advanced Topics in Chemistry.

330a. Bioorganic Chemistry. Spring 1994. MR. PAGE.

An introduction to structure and mechanism in bioorganic chemistry. Concepts and methods of physical organic chemistry are applied toward understanding the factors that govern the catalysis of reactions by enzymes.

Prerequisites: **Chemistry 226** and **251**, or permission of the instructor.

[**331a. Atmospheric Chemistry.**]

340a. Advanced Inorganic Chemistry. Fall 1993. Ms. BLAINE.

An in-depth coverage of inorganic chemistry. Spectroscopic and mechanistic studies of coordination and organometallic compounds, including applications to bioinorganic chemistry, are emphasized. Bonding in solid-state inorganic compounds is also included.

Prerequisites: **Chemistry 240** and **252** (the latter may be taken concurrently).

290a. Intermediate Independent Study. THE DEPARTMENT.

400a. Advanced Independent Study and Honors. THE DEPARTMENT.

For students intending to conduct a laboratory research project, one of **Chemistry 254**, **Biology 211**, or **Biology 212** is required.

Classics

Professor

John W. Ambrose, Jr., *Chair*

Associate Professor

Barbara Weiden Boyd

Assistant Professor

D. Neel Smith

Instructor

Stephen A. Hall

The Department of Classics offers two major programs: one with a focus on language and literature (classics), and one with a focus on classical

archaeology (classics/archaeology). Students pursuing either major are encouraged to study not only the languages and literatures but also the physical monuments of Greece and Rome. This approach is reflected in the requirements for the two major programs: for each, requirements in Greek and/or Latin and in classical archaeology must be fulfilled.

Classics

The classics program is arranged to accommodate both those students who have studied no classical languages and those who have had extensive training in Latin and Greek. The objective of classics courses is to study the ancient languages and literatures in the original. By their very nature, these courses involve students in the politics, history, and philosophies of antiquity. Advanced language courses focus on the analysis of textual material and on literary criticism.

Requirements for the Major in Classics

The major in classics consists of ten courses. At least six of the ten courses are to be chosen from offerings in Greek and Latin and should include at least two courses in Greek or Latin at the 300 level; one of the remaining courses should be **Archaeology 101** or **102**. Students concentrating in one of the languages are encouraged to take at least two courses in the other. No more than one classics course numbered in the 50s may be counted toward the major.

Classics/Archaeology

Within the broader context of classical studies, the classics/archaeology program pays special attention to the physical remains of classical antiquity. Students studying classical archaeology should develop an understanding of how archaeological evidence can contribute to our knowledge of the past, and of how archaeological study interacts with such related disciplines as philology, history, and art history. In particular, they should acquire an appreciation for the unique balance of written and physical sources that makes classical archaeology a central part of classical studies.

Requirements for the Major in Classics/Archaeology

The major in classics/archaeology consists of ten courses. At least five of the ten courses are to be chosen from offerings in archaeology, and should include **Archaeology 101**, **102**, and at least one archaeology course at the 300 level. At least four of the remaining courses are to be chosen from offerings in Greek and Latin, and should include at least one at the 300 level. No more than one classics course numbered in the 50s may be counted toward the major.

Interdisciplinary Major

The department participates in an interdisciplinary program in archaeology and art history. See page 126.

Requirements for the Minor

Students may choose a minor in one of five areas:

1. *Greek*: Five courses in the department, including at least four in the Greek language;
2. *Latin*: Five courses in the department, including at least four in the Latin language;
3. *Classics*: Five courses in the department, including at least four in the classical languages; of these four, one should be either **Greek 204** or **Latin 205**;
4. *Archaeology*: Six courses in the department, including either **Archaeology 101** or **102**, one archaeology course at the 300 level, and two other archaeology courses;
5. *Classical Civilization* (Greek or Roman): Six courses, including
 - a. — for the Greek civilization concentration:
 - two courses in the Greek language;
 - Archaeology 101**;
 - one of the following: **Classics 11** (or any other appropriate first-year seminar), **51**, or **52**; or **Philosophy 111**; or **Government 240**; or **History 201**;
 - and two of the following: **Archaeology 201**, **203**, or any 300-level archaeology course focusing primarily on Greek material; **Philosophy 331** or **335**; **Classics 290** (Independent Study) or any 200- or 300-level Greek or classics course focusing primarily on Greek material.
 - b. — for the Roman civilization concentration:
 - two courses in the Latin language;
 - Archaeology 102**;
 - one of the following: **Classics 11** (or any other appropriate first-year seminar) or **51**; or **Philosophy 111**; or **Government 240**;
 - and two of the following: **Archaeology 202**, **204**, or any 300-level archaeology course focusing primarily on Roman material; or **Classics 290** (Independent Study) or any 200- or 300-level Latin or classics course focusing primarily on Roman material.

Other courses in the Bowdoin curriculum may be applied to this minor if approved by the Classics Department.

Classics and Archaeology at Bowdoin and Abroad

Archaeology classes regularly use the outstanding collection of ancient art in the Bowdoin College Museum of Art. Of special note are the exceptionally fine holdings in Greek painted pottery and the very full and continuous survey of Greek and Roman coins. In addition, there are numerous opportunities for study or work abroad. Bowdoin is a participating member of the Intercollegiate

Center for Classical Studies in Rome, where students in both major programs can study in the junior year (see page 32). It is also possible to receive course credit for field experience on excavations. Interested students should consult members of the department for further information.

Students contemplating graduate study in classics or classical archaeology are advised to begin the study of at least one modern language in college, as most graduate programs require competence in French and German as well as in Latin and Greek.

ARCHAEOLOGY

Archaeology 101 and **102** are offered in alternate years.

101c. Introduction to Classical Archaeology: Greece. Fall 1993.

MR. SMITH.

A chronological survey of the archaeology of Greece, from the Neolithic to Alexander the Great. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes architecture, sculpture, vase painting, and the "minor arts." (Same as **Art 209.**)

102c. Introduction to Classical Archaeology: Rome. Fall 1994.

The archaeology of the Hellenistic kingdoms and Rome, from Alexander the Great to Constantine. First, attempts to define characteristic features of Hellenistic culture, then traces the emergence of a distinctively Roman civilization from both this background and native Italic traditions. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes mural painting, architecture, sculpture, and the "minor arts." (Same as **Art 210.**)

[**201c. Athens, the "School of Hellas."**]

(Same as **Classics 201.**)

[**202c. Rome of the Caesars.**]

(Same as **Classics 202.**)

[**203c. Greek Religion.**]

(Same as **Classics 203.**)

[**204c. Pompeii: Everyday Life in A.D. 79.**]

(Same as **Classics 204.**)

At least one of the following 300-level courses will be offered each year:

301c. Greek Painting and Mosaic. Fall 1993. MR. SMITH.

Primary focus is on black-figure and red-figure vase painting, which is well represented in the Bowdoin College Museum of Art. Topics include the role

of connoisseurship in criticism; the nature of the vase painting industry in Athens; the relation of vase painting to monumental painting and mosaics; and recent approaches to interpreting iconography.

Prerequisite: **Archaeology 101**.

[302c. **Greek and Roman Numismatics.**]

[303c. **Criticism and Aesthetic Theory in Antiquity.**]

[307c. **The Birth of Greek Art.**]

(Same as **Art 211**.)

311. Problems in Archaeology Method and Theory: Geographic Information Systems. Spring 1994. MR. SMITH.

Spatial analysis is fundamental to archaeology. How are geographic information systems changing archaeologists' approaches to their work? Topics include spatio-temporal modeling in GIS; the effect of geographic scale on archaeological questions; integration of remote sensing data, especially Landsat satellite data. Emphasis on hands-on experience using a wide variety of archaeological and environmental data sets.

Prerequisite: **Archaeology 101** or **102** or permission of the instructor. No specific previous experience with computers required.

CLASSICS

14c. Ancient Comic Traditions. Fall 1993. MR. HALL.

(For a full description of first-year seminars, see pages 94–100.)

[51c. **Classical Mythology.**]

52c. Greek Literature in Translation. Spring 1994. MR. AMBROSE.

An introduction to the important works of Greek literature in English translation. The objective of the course is not only to provide an understanding and appreciation of the literary achievements of the Greeks, but also to convey a sense of the meaning and spirit of Greek literature in the context of Greek history and culture.

[201c. **Athens, the "School of Hellas."**]

(Same as **Archaeology 201**.)

[202c. **Rome of the Caesars.**]

(Same as **Archaeology 202**.)

[203c. **Greek Religion.**]

(Same as **Archaeology 203**.)

[204c. **Pompeii: Everyday Life in A.D. 79.**]

(Same as **Archaeology 204**.)

[221c. **Women in the Life and Literature of Classical Antiquity.**]

[222c. **Sexuality and Society in Greece and Rome.**]

223c. Family and Society in Ancient Rome. Spring 1994. Ms. BOYD.

An exploration of the Roman concept of the family in historical and cultural context. Topics to be covered include the ancient definition of *familia*, and its legal and social implications; marriage and divorce; the ideal of *patria potestas* and real family dynamics; women's roles in the family; slavery and the roles of slaves in the family; the status, treatment, and education of children; household economics; and the Roman house, both urban and rural. Readings will be selected from both primary sources in translation (literary, historical, and documentary) and modern socio-historical studies of the topic. No background in classics is required.

GREEK**101c. Elementary Greek.** Every fall. MR. AMBROSE.

A thorough presentation of the elements of accidence and syntax based, insofar as possible, on unaltered passages of classical Greek.

102c. Elementary Greek. Every spring. MR. AMBROSE.

A continuation of **Greek 101**. During this term, a work of historical or philosophical prose is read.

203c. Plato. Every fall. MR. SMITH.**[204c. Homer.]**

One of the following advanced Greek courses will be offered each semester:

[301c. Homer: The Odyssey.]**302c. Lyric and Elegiac Poetry.** Spring 1994. Ms. BOYD.**[303c. The Historians.]****304c. Comedy.** Spring 1995. MR. AMBROSE.**305c. Tragedy.** Fall 1993. MR. AMBROSE.

Focuses on the works of Aeschylus, Sophocles, or Euripides. This course may be repeated for credit with the contents changed.

[306c. Plato and Aristotle.]**307c. The Orators.** Fall 1994. MR. AMBROSE.**[308c. The Alexandrian Age.]****LATIN****101c. Elementary Latin.** Every fall. Ms. BOYD.

A thorough presentation of the elements of Latin grammar. Emphasis is placed on achieving a reading proficiency.

102c. Elementary Latin. Every spring. MR. HALL.

A continuation of **Latin 101**. During this term, readings are based on unaltered passages of classical Latin.

203c. Intermediate Latin for Reading. Fall 1993. MR. AMBROSE.

A review of the essentials of Latin grammar and syntax and an introduction to the reading of Latin prose and poetry. Materials to be read change from year to year, but always include a major prose work and excerpts from Latin poetry.

Prerequisite: **Latin 102** or two to three years of high school Latin.

204c. Studies in Latin Literature. Every spring. MR. SMITH.

An introduction to different genres and themes in Latin literature. The subject matter and authors covered may change from year to year (e.g., selections from Virgil's *Aeneid* and Livy's *History*, or from Lucretius, Ovid, and Cicero), but attention is always given to the historical and literary context of the authors read. While the primary focus is on reading Latin texts, some readings from Latin literature in translation are also assigned.

Prerequisite: **Latin 203** or three to four years of high school Latin.

205c. Latin Poetry. Fall 1993. MS. BOYD.

An introduction to the appreciation and analysis of works by the major Latin poets. Readings include selections from poets such as Catullus, Lucretius, Horace, Virgil, and/or Ovid.

Prerequisite: **Latin 204** or four years (or more) of high school Latin.

One of the following advanced Latin courses will be offered each semester:

[**301c. The Historians.**]

[**302c. Ovid: *The Metamorphoses.***]

[**303c. Elegiac Poetry.**]

304c. Cicero and Roman Oratory. Fall 1994.

305c. Virgil: *The Aeneid.* Fall 1993. MS. BOYD.

[**306c. The Roman Novel.**]

307c. Satire. Spring 1994. MR. HALL.

308c. Roman Comedy. Spring 1995.

[**391c, 392c. Special Topics.**]

Independent Study in Greek, Latin, Archaeology, and Classics

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Computer Science

*Professor*Allen B. Tucker, Jr., *Chair**Assistant Professors*

David K. Garnick

Lance A. Ramshaw†

Requirements for the Major in Computer Science

The major consists of nine computer science courses and two mathematics courses (**Mathematics 171** and **228**), for a total of eleven courses. The computer science courses in the major are the two introductory courses (**Computer Science 101** and **102**), four intermediate “core” courses (**Computer Science 220, 231, 250, and 289**), and three elective courses (i.e., any computer science courses numbered 300 or above). Depending on individual needs, **Computer Science 290** or **400** (Independent Study) may be used to fulfill one or two of these elective requirements.

Requirements for the Minor in Computer Science

The minor consists of five courses, **Computer Science 101, 102, 220, 231, and Mathematics 228**.

Interdisciplinary Major

The department participates in an interdisciplinary major program in computer science and mathematics. See page 127.

Student-designed Major

Students who are interested in a student-designed major that combines computer science with another discipline are encouraged to discuss their ideas with the department.

[10a. Computers, Society, and Thought.]

101a. Introduction to Computer Science I. Every semester.

THE DEPARTMENT.

Emphasis on logic, problem specification and algorithm design, disciplined style and documentation, recursion, procedural abstraction, computer organization, and contemporary social issues in computing. A procedural programming language (Pascal) and an experimental laboratory environment are used to reinforce principles introduced in the lectures. A survey of the major subject areas of computer science provides a foundation for further study.

102a. Introduction to Computer Science II. Every spring. Spring 1994.

MR. TUCKER.

An introduction to the principles of data structures, abstraction, and their uses in classical software systems. Topics include complexity, stacks, queues, trees, graphs, sorting, searching, and their applications in compiler and operating system design. Laboratory work includes an object-oriented design methodology in Pascal.

Prerequisite: **Computer Science 101**.

220a. Computer Organization. Every fall. Fall 1993. MR. GARNICK.

Computer systems are organized as multiple layers. Each layer provides a more sophisticated abstraction than the layer upon which it is built. This course examines system design at the digital logic, microprogramming, and assembly language layers of computer organization. The goal of the course is to understand how it is possible for hardware to carry out software instructions. Laboratory work familiarizes students with a particular machine through assembly-language programming.

Prerequisite: **Computer Science 101.**

231a. Algorithms. Fall 1993. MR. TUCKER.

The study of algorithms concerns programming for computational expediency. The course covers practical algorithms as well as theoretical issues in the design and analysis of algorithms. Topics include trees, graphs, sorting, dynamic programming, NP-completeness, and parallel algorithms. Laboratory experiments are used to illustrate principles. (Same as **Mathematics 231.**)

Prerequisites: **Computer Science 102** and **Mathematics 228**, or permission of the instructor.

250a. Principles of Programming Languages. Every spring. Spring 1994. MR. GARNICK.

A comparative study of programming languages and paradigms, with special attention to object-oriented languages (Eiffel), functional programming languages (Lisp), and parallelism. Principles of programming-language design, including syntax, semantics, and compiling.

Prerequisite: **Computer Science 102.**

289a. Theory of Computation. Every spring. Spring 1994. MR. FISK.

The theoretical principles that underlie formal languages, automata, computability, and complexity. Topics include regular and context-free languages, finite and pushdown automata, Turing machines, Church's thesis, Gödel numbering, and unsolvability. (Same as **Mathematics 289.**)

Prerequisite: **Mathematics 228** or permission of the instructor.

290a. Intermediate Independent Study. THE DEPARTMENT.

310a. Operating Systems. Fall 1993. MR. GARNICK.

A study of the major issues in the design of modern operating systems. Dominant themes are scheduling techniques for processes and resources, historical perspectives via case studies, and trade-offs among design choices.

Prerequisites: **Computer Science 102** and **220.**

[**330a. Applied Algorithms.**]

[**335a. Parallel Computing.**]

[**360a. Compiler Construction.**]

365a. Formal Methods and Software Design Seminar. Spring 1994.

MR. TUCKER.

A study of contemporary principles and methods that underlie the design of large, complex software systems. Topics include object-oriented modeling and design, the software life cycle, security and reliability issues, user interfaces, formal specifications, and object-oriented design in C++. Case studies and a team software project for a complex application provide laboratory experience to complement the discussions and readings.

[370a. Artificial Intelligence.]

[375a. Natural Language Processing.]

400a. Advanced Independent Study and Honors. THE DEPARTMENT.

Economics

Professors

A. Myrick Freeman III

David J. Vail**

Associate Professors

Rachel Connelly*

Gregory P. DeCoster, *Chair*

John M. Fitzgerald

Jonathan P. Goldstein

Michael Jones†

Visiting Associate Professor

Robert J. McIntyre

Assistant Professors

Deborah S. DeGraff

Louis D. Johnston†

Andreas Ortmann

*Visiting Assistant Professor*John Santos (*fall semester*)

The major in economics is designed for students who wish to obtain a systematic introduction to the basic theoretical and empirical techniques of economics. It provides an opportunity to study economics as a social science with a core of theory, to study the process of drawing inferences from bodies of data and testing hypotheses against observation, and to study the application of economic theory to particular social problems. Such problems include Third World economic development, the functioning of economic institutions (e.g., corporations, government agencies, labor unions), and current policy issues (e.g., the federal budget, poverty, the environment, deregulation). The major is a useful preparation for graduate study in economics, law, business, or public administration.

Requirements for the Major in Economics

The major consists of three core courses (**Economics 255**, **256**, and **257**), two advanced topics courses numbered in the 300s, and two additional courses in economics numbered 200 or above. Because **Economics 101** is a prerequisite for **Economics 102**, and both are prerequisites for most other economics courses, most students will begin their work in economics with these introductory courses. Prospective majors are encouraged to take at least

one core course by the end of the sophomore year, and all three core courses should normally be completed by the end of the junior year. Advanced topics courses normally have some combination of **Economics 255, 256, and 257** as prerequisites. Qualified students may undertake self-designed, interdisciplinary major programs or joint majors between economics and related fields of social analysis.

To fulfill the major (or minor) requirements in economics, or to serve as a prerequisite for non-introductory courses, a grade of C or better must be earned in a course.

Students are strongly encouraged to complete **Mathematics 161**, or its equivalent, prior to the core courses.

Interdisciplinary Major

The department participates in an interdisciplinary major in mathematics and economics. See page 128.

Requirements for the Minor in Economics

The minor consists of **Economics 255 or 256**, and any two additional courses numbered 200 or above.

18b. Sustainable Development: Economics and the Environment.

Fall 1993. MR. VAIL.

(For a full description of first-year seminars, see pages 94-100.)

101b. Principles of Microeconomics. Every semester. THE DEPARTMENT.

An introduction to economic analysis and institutions, with special emphasis on the allocation of resources through markets. The theory of demand, supply, cost, and market structure is developed and then applied to problems in antitrust policy, environmental quality, energy, education, health, the role of the corporation in society, income distribution, and poverty. Students desiring a comprehensive introduction to economic reasoning should take both **Economics 101 and 102**.

102b. Principles of Macroeconomics. Every semester. THE DEPARTMENT.

An introduction to economic analysis and institutions, with special emphasis on determinants of the level of national income, prices, and employment. Current problems of inflation and unemployment are explored with the aid of such analysis, and alternative views of the effectiveness of fiscal, monetary, and other governmental policies are analyzed. Attention is given to the sources and consequences of economic growth and to the nature and significance of international linkages through goods and capital markets.

Prerequisite: **Economics 101**.

207b. International Economics. Fall 1994 or spring 1995. MR. JONES.

An analysis of the factors influencing the direction and composition of trade flows among nations, balance of payments equilibrium and adjustment mechanisms, and the international monetary system. Basic elements of

international economic theory are applied to current issues such as tariff policy, capital flows and international investment, reform of the international monetary system, and the international competitiveness of the American economy.

Prerequisites: **Economics 101 and 102.**

208b. American Economic History and Development. Fall 1994 or spring 1995. MR. JOHNSTON.

A survey of trends in the U.S. economy from colonial times to the present. Emphasis is placed on factors explaining economic growth and on the distinction between growth and welfare. Business cycles, labor and capital markets, transportation, and the importance of the international economy for U.S. development are discussed.

Prerequisites: **Economics 101 and 102,** or permission of the instructor.

209b. Financial Markets. Spring 1994. MR. ORTMANN.

A study of the economics of financial markets. Analytical tools needed to understand the domestic financial markets are developed and applied to current economic events. Topics include the money supply process; portfolio theory and the capital asset pricing model; the function, structure, and operation of debt and equity markets; the efficient markets hypothesis; and financial innovation and regulation.

Prerequisites: **Economics 101 and 102.**

[**210b. Economics of the Public Sector.**]

211b. Women in the Labor Market. Fall 1993. MR. SANTOS.

Examines the past, present, and future economic status of women. Topics include the historical evolution of the economic roles of women and men; the gender division of labor within the family and the allocation of time of the husband and wife between the household and the labor market; the interactions between rising female labor force participation and trends in marriage, fertility, and divorce rates; and economic explanations of gender differences in earnings and occupations, including the role of discrimination in observed market outcomes.

Prerequisite: **Economics 101.**

[**212b. Labor and Human Resource Economics.**]

[**213b. History of Economic Thought.**]

[**214b. Comparative Political Economy.**]

216b. Industrial Organization. Fall 1993. MR. ORTMANN.

A study of the organization of firms, their strategic interactions, and the role of information. Introduces basic game-theoretic concepts, with which most problems of industrial organization can be analyzed.

Prerequisite: **Economics 101** or permission of the instructor.

217b. The Economics of Population. Spring 1994. Ms. DEGRAFF.

A study of the interaction of economic variables and population processes, especially fertility, mortality, and migration. The first half of the course focuses on economic determinants of population dynamics; the second half, on the consequences of population growth for the economy. Analysis of both industrialized and developing countries is incorporated.

Prerequisite: **Economics 101.**

218b. Economics of Resources and Environmental Quality.

Spring 1994. MR. FREEMAN.

The economic dimensions of environmental quality and resource management problems faced by the United States and the world. The relationships among population, production, and pollution; the role of market failure in explaining the existence of pollution; evaluation of alternative strategies for pollution control and environmental management; the adequacy of natural resource stocks to meet the future demands of the United States and the world.

Prerequisite: **Economics 101.**

[219b,d. Underdevelopment and Strategies for Development in Poor Countries.]

[221b. Marxian Political Economy.]

[222b,d. International Trade and Economic Development.]

[223b. The International Economy since 1850.]

[229b. Germany in 1992.]

235b. The Russian Economy: Planning, Economic Reform, and Reorganization. Fall 1993. MR. MCINTYRE.

A survey of the development of the economic institutions and behavioral patterns of the Soviet and post-Soviet period. The economic development experience, mechanisms and problems of central planning, and the diverse history of reform efforts is considered. Special attention is given to the period after August 1991, and to the mixture of state-directed and market arrangements that emerged in the various successor republics.

Prerequisites: **Economics 101 and 102.**

255b. Microeconomics. Fall 1993 and spring 1994. MR. FITZGERALD.

An intermediate-level study of contemporary microeconomic theory. Analysis of the theory of resource allocation and distribution, with major emphasis on systems of markets and prices as a social mechanism for making resource allocation decisions. Topics include the theory of individual choice and demand, the theory of the firm, market equilibrium under competition and monopoly, general equilibrium theory, and welfare economics.

Prerequisites: **Economics 101 and 102.** Enrollment limited to 40 students. Elementary calculus will be used.

256b. Macroeconomics. Fall 1993 and spring 1994. MR. DECOSTER.

An intermediate-level study of contemporary national income, employment, and inflation theory. Consumption, investment, government receipts, government expenditures, money, and interest rates are examined for their determinants, interrelationships, and role in determining the level of aggregate economic activity. Policy implications are drawn from the analysis.

Prerequisites: **Economics 101** and **102**. Enrollment limited to 40 students. Elementary calculus will be used.

257b. Economic Statistics. Fall 1993 and spring 1994.

MR. GOLDSTEIN AND MS. DEGRAFF.

An introduction to the data and statistical methods used in economics. A review of the systems that generate economic data and the accuracy of such data is followed by an examination of the statistical methods used in testing the hypotheses of economic theory, both micro- and macro-. Probability, random variables and their distributions, methods of estimating parameters, hypothesis testing, regression, and correlation are covered. The application of multiple regression to economic problems is stressed.

Prerequisites: **Economics 101** and **102**. Enrollment limited to 40 students.

Courses numbered above 300 are advanced courses in economic analysis intended primarily for majors. Enrollment in these courses is limited to 18 students in each unless stated otherwise. Elementary calculus will be used in all 300-level courses.

301b. The Economics of the Family. Spring 1994. MS. CONNELLY.

Microeconomic analysis of the family, its roles, and its related institutions. Topics include marriage, fertility, labor supply, human capital formation, savings, consumption, bequests, and the family as an economic organization.

Prerequisites: **Economics 255** and **257**, or permission of the instructor.

302b. Business Cycles. Spring 1994. MR. GOLDSTEIN.

A survey of competing theories of the business cycle, empirical tests of cycle theories, and appropriate macro stabilization policies. Topics include descriptive and historical analysis of cyclical fluctuations in the United States, Keynesian-Kaleckian multiplier-accelerator models, NBER analysis of cycles, growth cycle models, theories of financial instability, Marxian crisis theory, new classical and new Keynesian theories, and international aspects of business cycles.

Prerequisites: **Economics 255** and **256**, or permission of the instructor.

303b. Models of Economic Growth. Fall 1994 or spring 1995.

MR. JOHNSTON.

A survey of growth theory and its applications. Topics include qualitative and quantitative analyses of economic growth, both within and across nations and regions, and the application of economic models to specific time periods.

Models to be studied include Malthusian models; the staples thesis; Harrod-Domar models; Rostow's "take-off" hypothesis and the role of leading sectors; neoclassical growth models; and endogenous growth models. Students develop their skills through a series of quantitative exercises, short essays, and a research paper on a topic of their choice.

Prerequisites: **Economics 255** and **256**, or permission of the instructor.

[**305b. Mathematics for Modern Economics.**]

[**308b. Advanced International Trade.**]

309b. Monetary Economics and Finance. Fall 1994 or spring 1995.

MR. DECOSTER.

Advanced study of monetary and financial economics. Topics include portfolio theory and asset pricing models; financial market volatility and the efficient markets hypothesis; options and futures; mergers and acquisitions; monetary and financial theories of the business cycle; and issues in the conduct of monetary policy.

Prerequisites: **Economics 255** and **256** and **Mathematics 161**, or permission of the instructor.

310b. Advanced Public Economics. Fall 1994 or spring 1995.

MR. FITZGERALD.

A survey of theoretical and empirical evaluations of government activities, considering both efficiency and equity aspects. Topics include public choice, income redistribution, benefit-cost analysis, analysis of selected government expenditure programs (including social security), incidence and behavioral effects of taxation, and tax reform. Current public policy issues are emphasized.

Prerequisites: **Economics 255** and **257**, or permission of the instructor. Not open to those who have taken **Economics 210**.

[**312b. Advanced Analysis of Labor Market Policies.**]

316b. Econometrics. Fall 1993. MR. GOLDSTEIN.

A study of the mathematical formulation of economic models and the statistical methods of testing them. A detailed examination of the general linear regression model, its assumptions, and its extensions. Applications to both micro- and macro-economics are considered. Though most of the course deals with single-equation models, an introduction to the estimation of systems of equations is included. An empirical research paper is required.

Prerequisites: **Economics 257** or **Mathematics 265**, and **Mathematics 161**, or permission of the instructor. Enrollment limited to 25 students.

318b. Environmental and Resource Economics. Fall 1993. MR. FREEMAN.

Analysis of externalities and market failure; models of optimum control of pollution and efficient management of renewable and nonrenewable natural resources such as fisheries, forests, and minerals; benefit-cost analysis, risk-

benefit assessment, and the techniques for measuring benefits and costs of policies.

Prerequisites: **Economics 255** and **257**. Not open to those who have taken **Economics 218**.

319b. The Economics of Development. Fall 1993. Ms. DEGRAFF.

Theoretical and empirical analysis of selected microeconomic issues within the context of developing countries. The course has a dual focus on modeling household decisions and on the effects of government policy and intervention. Topics include household labor allocation; agriculture production, land use, and land tenure systems; investment in education and human resource development; income inequality; and population dynamics.

Prerequisites: **Economics 255** and **257**, or permission of the instructor.

[**320b. Economics, Technology, and Progress.**]

[**329b. Open-Economy Macroeconomics.**]

349b. Economic Geography. Spring 1994. MR. DECOSTER.

Examines the spatial distribution of economic activity with the goal of understanding the changing patterns of economic agglomeration and demarcation observed in modern economies. Topics may include city formation, structure, and growth; models of systems of cities; urbanization and economic development; suburbanization and edge city economics; the dynamics of regional economic evolution; and financial issues in economic geography, such as the determinants of optimal currency areas. Theoretical analysis is supplemented with applications drawn from current developments, such as European economic unification.

Prerequisites: **Economics 255** and **Mathematics 172**, or permission of the instructor.

355b. Topics in Advanced Microeconomic Theory: The Theory and Practice of Games and Decisions. Spring 1994. MR. ORTMANN.

Many problems in business, politics, and everyday life can be framed in simple game-theoretic terms. Introduces the essential ideas of noncooperative game theory and asymmetric information. Also introduces the student to the use of experimental methods in economics.

Prerequisite: **Economics 255** or permission of the instructor.

400b. Independent Study and Honors. THE DEPARTMENT.

Education

Assistant Professor

T. Penny Martin, Chair

Associate in Education

Jonathan W. Robbins

Bowdoin College does not offer a major in education.

Requirements for the Minor in Education

The minor in education consists of four courses.

Requirements for Certification to Teach in Public Secondary Schools

Because teaching in the public schools requires some form of licensure, the education department provides a sequence of courses leading to certification for secondary school teaching. This sequence includes the following:

1. A major in the discipline the student intends to teach, such as history, Spanish, biology, mathematics, or English. Public schools rarely offer more than one course in subjects such as sociology, philosophy, anthropology, art history, religion, or economics, so students with interests in those and similar fields should meet with Ms. Martin as soon as possible to develop a program that will include those interests within a teaching field. While students' programs of study at Bowdoin need not be seriously restricted by plans to teach, majors and minors should be chosen with teaching possibilities in mind.

2. Five courses offered by the Department of Education: one 100-level course; one 200-level course; and **Education 301, 302, and 303**.

3. Two courses in the Department of Psychology, including a course in human development or learning theory.

4. Volunteer experience in a school.

Because education is not a major at Bowdoin, students interested in teaching as a career must plan the completion of course work for certification carefully.

Requirements for Teaching in Private Schools

State certification is not usually a requirement for teaching in independent schools. Thus, there is no common specification of what an undergraduate program for future private school teachers should be. In addition to a strong major in a secondary-school teaching field, however, it is recommended that prospective teachers follow a sequence of courses similar to the one leading to public school certification.

There is a further discussion of careers in teaching on page 32.

101c. Education in the Twentieth Century. Every other year. Fall 1994.
Ms. MARTIN.

Examines the past four decades of schooling in the United States, beginning with the *Brown* school desegregation decision in 1954. Topics include the purpose of schooling and what should be taught, the expanding role of the federal government in education, the rise of new populations and

new educational institutions, awareness of students' rights, issues of gender, and the reform movements of the 1980s. The role of schools and colleges in society's pursuit of equality and excellence forms the backdrop of this study.

102c. History of American Education. Every other year. Fall 1993.

Ms. MARTIN.

A study of the evolution of American educational ideas and institutions through the mid-twentieth century. Enduring themes that have shaped American education, such as the purpose of schooling, the nature of the curriculum, and the training and role of the teacher, are traced through the works of such figures as Horace Mann, Mary Lyon, W. E. B. DuBois, and John Dewey.

[105c. Topics in Education.]

201c. Schools and Communities. Every other year. Spring 1994.

Ms. MARTIN.

A study of the relationships between schools, parents, and their communities. Through field work in local communities, students observe how large issues, such as the purpose of schooling, the influence of federal and state governments, and the role of parents, work themselves out on the local level.

Prerequisite: **Education 101** or **102**, or permission of the instructor.

202c. Education and Biography. Every other year. Spring 1995.

Ms. MARTIN.

An examination of issues in American education through biography, autobiography, and autobiographical fiction. The effects of class, race, and sex on teaching, learning, and educational institutions are seen from the viewpoint of the individual, one infrequently represented in the professional literature. Authors include Franklin, Larcom, Henry Adams, Cather, McPhee, Sarton, Angelou, and Lightfoot.

Prerequisite: **Education 101** or **102**, or permission of the instructor.

250c. Law and Education. Every other year. Fall 1994. MR. ISAACSON.

A study of the intersection of two fundamental American social institutions: the judiciary and the education system. Examines the influence of the courts on the operation and objectives of schools. Issues to be discussed include free speech, student discipline, sex discrimination, religious objections to curriculum and compulsory education, race relations, and teachers' rights. Statutory developments in such areas as special education, bilingual instruction, and school financing are also examined.

301c. Teaching. Fall 1993. Ms. MARTIN.

A study of what takes place in classrooms: the methods and purposes of teachers, the response of students, and the organizational context. Readings and discussions help inform students' direct observations and written accounts of local classrooms. Peer teaching is an integral part of the course experience.

Prerequisites: Senior standing, one Bowdoin education course, one psychology course, and permission of the instructor.

302c. Student Teaching. Spring 1994. MR. ROBBINS.

Because this final course in the student teaching sequence demands a considerable commitment of time and serious responsibilities in a local secondary school classroom, enrollment in the course requires the recommendation of the instructor of **Education 301**. Recommendation is based on performance in **Education 301**, the student's cumulative and overall academic performance at Bowdoin, and the student's good standing in the Bowdoin community. Required of all students who seek secondary public school certification, the course is also open to those with other serious interests in teaching. In addition to daily work in the local school, weekly on-campus class and conference meetings and writing projects are required. Grades are awarded on a Credit/Fail basis only. **Education 303 must be taken concurrently with this course.**

Prerequisites: Senior standing, three Bowdoin education courses, including **Education 301**; two psychology courses, including one in human development or learning theory; volunteer experience in the schools; and permission of the instructor.

303c. Curriculum. Spring 1994. MR. ROBBINS.

A study of the knowledge taught in schools; its selection and the rationale by which one course of study rather than another is included; its adaptation for different categories of students; its cognitive and social purposes; the organization and integration of its various components.

Prerequisite: **Education 301** or permission of the instructor.

290c. Intermediate Independent Study.

400c. Advanced Independent Study.

English

Professors

Franklin G. Burroughs, Jr.

Joanne F. Diehl, *Chair*

James D. Redwine, Jr.

William C. Watterson

Associate Professors

Celeste Goodridge

Joseph D. Litvak

Marilyn Reizbaum

Assistant Professors

David Collings

Ann L. Kibbie

Visiting Assistant Professor

Elizabeth Muther

Senior Lecturer

Elizabeth Chadwick

Requirements for the Major in English and American Literature

The major requires a minimum of ten courses, three of which must be chosen from offerings in English literature before 1800 (**English 200, 201, 202, 210, 211, 220, 221, 222, 223, 230, 231, and 250**). Only one of these three courses may be a Shakespeare course. Seven additional units may

be selected from the foregoing and/or **English 10–29** (first-year seminars, not more than two); **61–63** (Creative Writing, only one); **101–103**; **240–282**; **300–399**; **291–292** (independent study); and **401–402** (advanced independent study). Students who intend to major in English should take a minimum of three courses in the department before declaring the major. Credit toward the major for advanced literature courses in another language, provided that the works are read in that language, and other exceptions to the requirements, must be arranged with the chair.

Majors who are candidates for honors must take the honors seminar in the fall of their senior year, write an honors essay, and take an oral examination in the spring.

Requirements for the Minor in English and American Literature

The minor requires at least five of the above courses.

First-Year Seminars in English Composition and Literature

These courses are open to first-year students. The first-year English seminars are numbered 10–19 in the fall; 20–29 in the spring. Usually there are not enough openings in the fall for all first-year students who want an English seminar. First-year students who cannot get into a seminar in the fall are given priority in the spring. The main purpose of the first-year seminars (no matter what the topic or reading list) is to give first-year students extensive practice in reading and writing analytically. Each seminar is normally limited to 16 students and includes discussion, outside reading, frequent papers, and individual conferences on writing problems.

For a full description of first-year seminars, see pages 94–100.

- 10c. Entering Nature.** Fall 1993. MR. BURROUGHS.
- 11c. Unspeakable Sexualities.** Fall 1993. MR. COLLINGS.
- 12c. Contemporary Fiction.** Fall 1993. MS. GOODRIDGE.
- 13c. Gender, Class, and Comedy in American Film, 1933–1983.** Fall 1993. MR. LITVAK.
- 14c. Movements and Manifestoes: Modernism in London and New York.** Fall 1993. MS. MUTHER.
- 15c. Satire.** Fall 1993. MR. REDWINE.
- 16c. “When Do We Live? That’s What I Want to Know.”** Fall 1993. MR. WATTERSON.
- 20c. The Contemporary Essay.** Spring 1994. MR. BURROUGHS.
- 21c. Literature and Medicine.** Spring 1994. MS. DIEHL.
- 22c. Twentieth-Century Autobiographical Writing.** Spring 1994. MS. GOODRIDGE.
- 23c. *Film Noir*.** Spring 1994. MS. KIBBIE.

24c. Drama. Spring 1994. MR. REDWINE.

English 101 and 102: Survey Course in English Literature

A reading course, with examinations, designed to familiarize students with the main currents of English literature, from Anglo-Saxon times to the twentieth century. Limited to 75 students each semester, with preference given in **English 101** to sophomores, juniors, and AP first-year students (in that order) and in **English 102** to students completing **English 101** and to first-year students completing a first-year seminar.

101c. Every fall. Fall 1993. Ms. KIBBIE.

Provides a broad introduction, from the beginnings to the end of the eighteenth century. Individual works are studied in the context of major stylistic, thematic, and historical developments. Special attention is given to genre and prosody. Major writers include Chaucer, Shakespeare, Donne, Milton, and Pope.

102c. Every spring. Spring 1994. MR. COLLINGS.

Emphasizes major stylistic, thematic, and historical developments, from the Romantic movement at the end of the eighteenth century, through the Victorian age, and into modern British poetry. Major writers may include Blake, Wordsworth, Coleridge, Shelley, Byron, Keats, Brontë, Tennyson, Arnold, Dickens, Rossetti, Browning(s), Yeats, Eliot, and Woolf.

Courses in Composition and Creative Writing

60c. English Composition. Spring 1994. Ms. REIZBAUM.

Practice in expository and critical writing, with special attention to the preparation, writing, and analysis of student essays. Focuses on different modes of composition through an examination of essay writing by several authors.

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

61c. Creative Writing I. Spring 1994. MR. WATTERSON.

Course format is part workshop, part tutorial. Concentrates exclusively on the writing of poetry.

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

63c. Creative Writing II: Narrative. Spring 1995. MR. BURROUGHS.

A workshop for writers interested in fictional and/or nonfictional prose narrative.

Prerequisite: Permission of the instructor. Participants to be selected on the basis of an 8–15-page writing sample, to be submitted to the instructor. Enrollment limited to 15 students.

Advanced Courses in English and American Literature

103c. The Bible in Literary Focus. Spring 1994. MR. LONG.

A study of selected narratives and poems, with emphasis on the diverse imaginative worlds of the Bible and, accordingly, on various modern

approaches to literary study. Attention is also given to the Bible as a wellspring of images and motifs for Western literary artists. (Same as **Religion 204.**)

[200c. Old English.]

201c. Chaucer. Every other year. Spring 1994. MR. BURROUGHS.
Emphasis on *The Canterbury Tales*.

202c. Topics in Middle English Literature. Fall 1994. **Chaucer and the Tradition of Epic.** MR. BURROUGHS.

Focuses on the *Aeneid*, *The Divine Comedy*, and the earlier work of Chaucer, especially *Troilus and Criseyde*.

210c. Shakespeare's Comedies and Romances. Every fall. Fall 1993.
MR. WATTERSON.

Examines *A Midsummer Night's Dream*, *The Merchant of Venice*, *Twelfth Night*, *As You Like It*, *The Winter's Tale*, *Cymbeline*, *Pericles*, and *The Tempest* in light of Renaissance genre theory.

211c. Shakespeare's Tragedies and Roman Plays. Spring 1994.

MR. WATTERSON.

Examines *Hamlet*, *Othello*, *Macbeth*, *King Lear*, *Julius Caesar*, *Antony and Cleopatra*, and *Coriolanus* in light of recent critical thought. Special attention is given to psychoanalysis, new historicism, and genre theory.

220c. English Literature of the Early Renaissance. Every other fall. Fall 1993. MR. REDWINE.

A critical study of the literature of the sixteenth century, with emphasis on Elizabethan nondramatic poetry.

221c. English Literature of the Late Renaissance. Every other spring. Spring 1994. MR. REDWINE.

A critical study of the literature of the seventeenth century exclusive of Milton, with emphasis on the poetry of Donne, Jonson, and their followers.

222c. Milton. Every other year. Fall 1994. MR. REDWINE.

A critical study of his chief writings in poetry and prose.

223c. Elizabethan and Stuart Drama. Every other year. Spring 1995.

MR. REDWINE.

A study of some comedies, tragedies, tragicomedies, and history plays by Shakespeare's predecessors, contemporaries, and followers in England during the sixteenth and seventeenth centuries—plays by Lily, Kyd, Marlowe, Dekker, Jonson, Tourneur, Webster, Beaumont, Fletcher, Massinger, and Ford, among others.

230c. The Politics of Genre in Restoration and Early-Eighteenth-Century Literature. Every other year. Fall 1993. MS. KIBBIE.

This survey of the drama, poetry, and prose of Restoration and early-eighteenth-century England focuses on how writers turned to satire as a weapon in the social and political battles of the time, and how this is related

to their project of destroying, redefining, or purifying conventional genres (such as the heroic tragedy or the pastoral). Considers the emergence of a literary marketplace and its effect upon ideas of authorship. Writers include Dryden, Gay, Pope, Swift, Richardson, and Fielding.

231c. Sublimity and Sentiment in the Eighteenth Century. Spring 1994. MS. KIBBIE.

Focuses on the development of two literary movements in eighteenth-century England: the Sublime and the Sentimental. The study of the Sublime movement, represented by the Graveyard Poets, Addison, Edmund Burke, Collins, and Smart, leads to a consideration of political as well as literary revolutions, while analysis of the Sentimental movement, represented by Steele, Lillo, Richardson, and Sterne, requires a discussion of gender and sexuality. Other readings include works of Johnson, Boswell, Hume, Gibbon, and Goldsmith.

240c. English Romanticism I. Every other year. Fall 1994. MR. COLLINGS.

Examines the first generation of English Romantics. Includes discussion of such authors as Burns, Blake, Wordsworth, Coleridge, and Lamb.

241c. English Romanticism II. Every other year. Spring 1995.

MR. COLLINGS.

Examines the second generation of English Romantics. Includes discussion of such authors as Byron, Shelley, Clare, Hazlitt, Keats, and De Quincey.

242c. Victorian Poetry and Prose. Spring 1995. MR. LITVAK.

Not a survey course, but an examination of a specific issue that traverses generic boundaries and opens up new ways of thinking about the Victorians. Authors to be considered may include Tennyson, the Brownings, Disraeli, Gaskell, Thackeray, and Wilde.

250c. The Rise of the Novel. Every other year. Spring 1995. MS. KIBBIE.

Traces the emergence of the novel in the eighteenth century as a distinct genre that absorbed earlier kinds of writing but also provided something new. Authors read include Bunyan, Behn, Defoe, Richardson, Fielding, Sterne, Smollett, and Burney. Enrollment limited to 40 students.

251c. The Romantic Novel. Every other year. Fall 1993. MR. COLLINGS.

Readings in novels of the Romantic period. Authors include Godwin, Radcliffe, Edgeworth, Austen, Mary Shelley, and Scott.

252c. The Victorian Novel. Every other spring. Spring 1994. MR. LITVAK.

Emphasizes the social and political significance of novels by Emily Brontë, Charlotte Brontë, Charles Dickens, Elizabeth Gaskell, Wilkie Collins, George Eliot, Anthony Trollope, Thomas Hardy, and George Gissing.

[260c. Twentieth-Century British Poetry.]

261c. Twentieth-Century British Fiction. Spring 1994. Ms. REIZBAUM.

A glance at works written by authors of what are (roughly) the British Isles. Includes a section on British feminism (Woolf, Mansfield, Richardson, Kate O'Brien), some representations of the "colonial" text (Doris Lessing, Jean Rhys), British avant-gardism, (post) modernism (Joyce, Beckett), works from the contemporary scene, and more.

262c. Modern Drama. Every other year. Fall 1993. Ms. REIZBAUM.

Focuses on British and American dramas, including the works of Stoppard, Wilde, Nztoke Shange, Beckett, Albee, and Wasserstein, and some Continental playwriting (Brecht, Ibsen).

270c. American Literature to 1860. Every other year. Fall 1994.

Ms. DIEHL.

An overview of American literature from its beginnings to the American Renaissance. Examines the diverse cultural heritage that shapes the American literary tradition. Readings include a wide range of writers, both canonical and noncanonical, in an attempt to redefine the contributions of Native American, women, African-American, and Hispanic authors, within a rich and distinctive emergent American literary culture.

[271c. *American Literature, 1860–1917.*]

272c. American Fiction, 1917–1945. Every other year. Fall 1993.

Ms. GOODRIDGE.

Focuses on American literature of the twenties and thirties. Attention is given to the various ways in which the historical events emerge or are repressed in this fiction. Writers include Wharton, Cather, Hemingway, Fitzgerald, Boyle, Porter, and Faulkner.

Enrollment limited to 40 students.

273c. American Fiction since 1945. Every other year. Spring 1994.

Ms. DIEHL.

Analyzes the various experiments in fiction since the 1950s. Issues of gender, stylistic innovation, and self-reflection are emphasized.

Enrollment limited to 40 students.

274c. American Poetry in the Twentieth Century. Spring 1995.

Ms. GOODRIDGE.

Poets include Frost, Stevens, Williams, Moore, Bishop, Brooks, Lowell, Merrill, Rich, and Plath.

Enrollment limited to 40 students.

275c,d. African-American Fiction: History and Ideology. Spring 1994.

Ms. MUTHER.

An anti-survey: We work chronologically from the eighteenth to the twentieth century, but compare works in the "tradition" of African-American literature with revisions of history offered by recent African-American

writers. Pairs of writers may include Wheatley and Lorde, Equiano and Johnson, Jacobs and Morrison, Hughes and Brooks, Hurston and Walker, Wright and Wideman. (Same as **Africana Studies 275**.)

276c,d. African-American Poetry: The Harlem Renaissance. Fall 1993. Ms. MUTHER.

Readings of poetry from Paul Laurence Dunbar to Sterling Brown frame our discussions of the Harlem Renaissance, the black literary and cultural call-to-arms of the 1920s. We consider the international context for African-American arts, including music, of this period, as well as the “history-making” and “race-building” aspirations of Harlem-based writers and intellectuals. One important focus is the politics of gender during this decade. Authors include DuBois, Johnson, Toomer, Hughes, McKay, Cullen, Locke, Garvey, Fisher, Larsen, Bonner, West, and Hurston. Leading black periodicals of the decade—*Crisis*, *The Messenger*, *Opportunity*, and *Fire!!*—are also examined. (Same as **Africana Studies 276**.)

280c. Women Writers in English. Every other year. Fall 1993. Ms. DIEHL.

A study of traditions of women’s writing. Authors will include Atwood, Kincaid, LeGuin, Lispector, Moore, and Morrison.

Enrollment limited to 40 students.

[281c. Narrative.]

282c. An Introduction to Literary Theory Through Popular Culture.

Every other year. Fall 1994. MR. LITVAK.

Designed for students who have not read extensively in contemporary literary theory but wish to familiarize themselves with the new and highly influential ways of thinking about literature and culture that “theory” has come to comprise. Readings in structuralist, deconstructive, feminist, psychoanalytic, new historicist, African-American, and lesbian and gay theory are paired with examples from popular or mass-cultural forms such as best-selling novels, music videos, Hollywood films, and soap operas; the “high” and the “abstract” will not only explain but also be explained by the “low” and the “concrete.” Frequent short papers and occasional evening screenings.

300c. Honors Seminar: Literary Theory. Fall 1993. MR. LITVAK.

An analysis of semiotic, deconstructive, psychoanalytic, feminist, Marxist, African-American, and gay and lesbian theories of literature.

Prerequisite: Enrollment in honors program or permission of the instructor. Enrollment limited to 15 students.

310c–350c. Studies in Literary Genres. Every year.

Lectures, discussions, and extensive readings in a major literary genre: e.g., the narrative poem, the lyric poem, fiction, comedy, tragedy, or the essay.

310c. Faulkner’s Major Fiction. Fall 1993. MR. BURROUGHS.

Surveys the major Yoknapatawpha fiction, from *Flags in the Dust* (1929) to *Go Down, Moses* (1942).

311c. The Contemporary American Lyric Poem. Fall 1993. Ms. DIEHL.

Readings in the brief contemporary American poem, with emphasis on the origins of this genre and current work in the field. Selections from a wide range of poets, including Louise Glück, James Merrill, Rita Dove, and Robert Hass. Students write short explications of poems. In addition, they are asked to keep a journal throughout the semester that includes responses to poets encountered. Essays by contemporary poets, current criticism, and poets' autobiographical prose (when available) are also studied.

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

313c. The Joyce Legacy. Fall 1993. Ms. REIZBAUM.

A study of James Joyce's major texts (*Dubliners*, *Portrait*, *Ulysses*) in the context of essays and other writings by and about Joyce and/or his contributions to literary history in this century (Borges, Djuna Barnes, Olive St. John Gogarty, Julia Kristeva, and others).

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

314c. The History of the Body: Carnival. Spring 1994. MR. COLLINGS.

A study of the history of the body in the culture of Western Europe from the fourteenth through the twentieth century, primarily in the context of carnival. Considers the place of the body in the ritual transgression of social norms and in the construction of social space (the marketplace, the theater, the city streets). Examines the changing discourses of the body in relation to the history of manners, sexuality, and the middle-class subject. Authors may include Chaucer, Erasmus, Shakespeare, Jonson, Dryden, Charke, Swift, Goethe, DeQuincey, Mayhew, and Freud, with theoretical readings in Bakhtin, Girard, Elias, Stallybrass, and White, Foucault, Edelman, and Kipnis.

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

315c. Bloomsbury. Spring 1994. Ms. GOODRIDGE.

Considers some of the writers and artists associated with the Bloomsbury community in London during the first three decades of this century. Examines fiction, letters, and journals by Virginia Woolf, E. M. Forster, Vita Sackville-West, and others. Evaluates some of the recent critical and filmic representations of these writers' lives and work.

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

316c. Sophistication and the Politics of Taste in Modern Western Culture. Spring 1994. MR. LITVAK.

What is sophistication? What is its history? How is it involved in the construction of class, race, gender, sexuality, and nationality? What is its relation to the more general politics of taste, and to such phenomena as

vulgarity, sentimentality, and pretentiousness? How does it interact with the cultural politics of *antisophistication*? What is its role in contemporary literary and cultural studies, and in the theory and practice of a liberal arts education? Readings and discussions range from literary high culture (novels by Flaubert, Wharton, Proust, Larsen, Nabokov, Naylor) to the cinema (films by Lubitsch, Renoir, Cukor, Wilder, Sirk, Lee), television (“The Simpsons,” David Letterman, MacNeil/Lehrer), popular music (Porter, Ellington, Rodgers and Hart), journalism (the *New Yorker*, *Vanity Fair*, the *New York Times*), and literary and cultural criticism (Arnold, Wilde, Barthes, Sontag, and Bourdieu). Frequent evening screenings in addition to regular class sessions.

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

317c. Civil Rights and Black Power: African-American Literature, 1954–1976. Spring 1994. Ms. MUTHER.

Evaluates speeches, oral histories, and journalism as well as literary repercussions of the nonviolent civil rights and militant Black Power movements. Extensive critical and theoretical readings. (Same as **Africana Studies 317.**)

Prerequisite: Permission of the instructor. Enrollment limited to 15 students.

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Environmental Studies

Administered by the Committee on Environmental Studies

Edward P. Laine, *Program Director*

Lecturer

Edward S. Gilfillan

Visiting Lecturer

Evan Richert

Requirements for the Coordinate Major in Environmental Studies (ES)

The major involves the completion of a departmental major and the following seven courses:

Required environmental studies courses

1. ES 101, Introduction to Environmental Studies.

2. Senior seminar: A culminating course of one semester is required of majors. Such courses are multidisciplinary, studying a topic from at least two or three areas of the curriculum. **ES 390, 391, 392, or 393** will meet this requirement.

3. **Five courses approved for environmental studies credit:** These courses are designated "Environmental Studies" or are cross-listed with environmental studies. The distribution of these five courses is as follows:

a. One course from each of the three curriculum areas: the sciences, social sciences, and arts and humanities.

b. Two elective courses: These courses may be chosen from environmental studies or the approved cross-listings. However, students are urged to consider **ES 290** and **400**, intermediate and advanced independent studies, in consultation with the program.

101. Introduction to Environmental Studies. Every fall. MR. LAINE.

An examination of the earth's major environmental systems and of the relationship between these systems and such fundamental issues as population growth, resource and energy quality and sufficiency, and environmental quality. Topics include the meaning and usefulness of scientific information and insights for such complex questions as quality of the atmosphere and climatic change, depletion of fresh water, loss of soil productivity, loss of genetic diversity, toxic contamination and waste disposal, and tropical deforestation. The course includes a project on campus environmental issues.

Enrollment limited to 75 students, with preference given to first- and second-year students. Required for environmental studies majors beginning with the class of 1995.

115a. Introduction to Environmental Sciences. Every spring.

MR. GILFILLAN.

An interdisciplinary introduction to the environmental sciences. Course material includes surficial and environmental geology and marine and aquatic ecology. In addition to classroom work, there are weekly sessions of laboratory work or field work that focus on local environmental problems. (Same as **Geology 115**.)

Prerequisite: **ES 101** or permission of the instructor. Enrollment limited to 25 students; preference given to students intending to major in either geology or environmental studies.

200a. Marine Ecology. Fall 1993. MR. GILFILLAN.

The relationships between organisms and their environment are considered in the context of animals and plants living in the sea. The concept of marine communities living in dynamic equilibrium with their physical-chemical environment is introduced, and the influence of human activities on the ecology of marine organisms is explored. (Same as **Biology 156**.)

Prerequisite: A college-level science course or permission of the instructor.

220b. Environmental Law. Fall 1994.

An examination of how society responds to environmental problems, considering a range of alternative legal strategies. Concepts in remedies, administrative law, and constitutional law, as well as economics and the sciences, are used to understand these problems and probable solutions.

Prerequisite: Junior or senior standing.

236c. Environmental Analysis: Political Philosophy and Policy. Spring 1994 and spring 1995. MR. SIMON.

Examines aspects of the environmental crisis, with special emphasis on political issues. Topics include our relation to and responsibility for nature in light of the present crisis; the adequacy of the conceptual and political resources of our tradition to address the crisis; the interconnection of scientific, moral, political, and policy factors; and the philosophical critique of methodological approaches such as cost-benefit analysis. (Same as **Philosophy 236**.)

241b. Principles of Land-Use Planning. Spring 1994. MR. RICHERT.

Land—how it is used, who controls it, the tension between private and public rights to it—is central to today’s environmental debate. Land-use planning is inevitably part of that debate. It is a bridge between the physical environment (the land) and the social, economic, and political forces affecting that environment. The course exposes students to the physical principles of land-use planning and the legal and socioeconomic principles that underlie it. Enrollment limited to 35 students.

Prerequisite: Junior or senior standing. Preference given to environmental studies majors.

258c. Environmental Ethics. Fall 1993 and fall 1995. MR. SIMON.

The central issue in environmental ethics concerns what things in nature have moral standing and how conflicts of interest among them are to be resolved. Specific topics to be covered include an introduction to ethical theory, anthropocentrism, the moral status of nonhuman sentient things, preservation of endangered species and the wilderness, the moral status of nonsentient living things, holism versus individualism, and the land ethic. (Same as **Philosophy 258**.)

Prerequisite: Sophomore standing.

390. Seminar in Environmental Studies: In Search of the Common Good—A Critical Look at Feminism, Multiculturalism, and Ecology. Spring 1994. MR. RENSENBRINK.

An interdisciplinary seminar for students with a focus in Asian studies, Africana studies, environmental studies, and/or women’s studies. First discusses the concept of the common good, with emphasis on the nature and feasibility of democracy under modern conditions. Then examines concepts of feminism, multiculturalism, and ecology as they evolve in social movements of the late twentieth century. Readings include works of intellectuals and activists within each movement. A final section attempts to put in critical perspective the relation between these movements and the common good. (Same as **Africana Studies 390** and **Women’s Studies 390**.)

Prerequisites: Two or more lower-level courses in one or more of the four interdisciplinary programs, or permission of the instructor. Enrollment limited to 15 students. Preference given to seniors.

391. Seminar in Environmental Studies: The Gulf of Maine. Fall 1993. MR. GILFILLAN. Spring 1994. MR. LAINE.

A study of the environmental challenges facing the Gulf of Maine and surrounding bioregions, with major emphasis on student project work. Students are encouraged to plan and carry out a project of their own choosing. Some of this work may be directed toward support of the Bicentennial Institute on the Gulf of Maine, which will take place in April 1994.

Enrollment limited to 15 students. Preference given to junior and senior environmental studies majors.

392. Seminar in Environmental Studies: Advanced Topics in Environmental Philosophy. Fall 1994. MR. SIMON.

(Same as **Philosophy 392.**)

290. Intermediate Independent Study. THE PROGRAM.

400. Advanced Independent Study and Honors. THE PROGRAM.

CROSS LISTINGS

(For full course descriptions and prerequisites, see the appropriate department listings.)

Sciences

Biology 54a. Concepts in Ecology and Evolutionary Biology. Every other spring. Spring 1994. MR. WHEELWRIGHT.

Biology 115a. Ecology. Every fall. Fall 1993. MR. WHEELWRIGHT.

Biology 119a. Biology of Marine Organisms. Every fall. Fall 1993.

Geology 100a. Introduction to Environment Geology. Fall 1993. MR. LEA.

Geology 256a. Environmental Geology. Every fall. Fall 1993. MR. LAINE.

Geology 278a. Quaternary Environments. Spring 1995. MR. LEA.

Social Sciences

Anthropology 220b,d. Hunters and Gatherers. Spring 1995. Ms. KAPLAN.

Anthropology 231b,d. Native Peoples and Cultures of Arctic America. Fall 1993. Ms. KAPLAN.

Economics 218b. Economics of Resources and Environmental Quality. Spring 1994. MR. FREEMAN.

Economics 318b. Environmental and Resource Economics. Fall 1993. MR. FREEMAN.

Government 283b. International Environmental Law and Organization. Spring 1994. MR. SPRINGER.

***Sociology 222b. Introduction to Human Population.** Spring 1995.
MS. RILEY.

***Sociology 251b. Sociology of Health and Illness.** Spring 1994.
MS. BELL.

Humanities

***Art 190c. Architectural Design I.** Spring 1994. MR. GLASS.

Religion 253c. Religion, Women, and Nature. Fall 1993. MS. MAKARUSHKA.

Film Studies

Assistant Professor

Patricia A. Welsch, *Chair*

Film has emerged as one of the most important art forms of the twentieth century. Film studies at Bowdoin introduces students to the grammar, history, and literature of film in order to cultivate an understanding of both the vision and craft of film artists and of the views of society and culture expressed in cinema.

Bowdoin College does not offer a major in film studies.

101c. Film Narrative. Fall 1993. MS. WELSCH.

The study of film combines the formal beauty of painting, the intricacies of plot and character found in literature, and the influences of history, economics, and politics. This course surveys masterpieces of Italian, German, French, Japanese, and American film and is intended as a beginning course in film analysis. We build a vocabulary with which to explore the narrative and visual strategies of this popular form. Attendance at weekly evening screenings is required.

201c. History of Film, 1895–1940. Fall 1993. Fall 1994. MS. WELSCH.

Examines the development of film from its origins to the American studio era. Includes early work by the Lumières, Méliès, and Porter, and continues with Griffith, Murnau, Eisenstein, Chaplin, Keaton, Stroheim, Pudovkin, Lang, Renoir, and von Sternberg. Special attention is paid to the practical and theoretical concerns over the coming of sound. Attendance at weekly evening screenings is required.

*Courses marked with an asterisk will receive environmental studies credit with the approval of the instructor. It is expected that a substantial portion of the student's research efforts will focus on the environment.

202c. History of Film, 1940 to the Present. Spring 1994. Spring 1995. Ms. WELSCH.

A consideration of the diverse production contexts and political circumstances influencing cinema history in the sound era. National film movements to be studied include neorealism, the French New Wave, and the New German Cinema, as well as the coming of age of Asian and Australian film. This course also explores the shift away from studio production in the United States, the major regulation systems, and the changes in popular film genres. Attendance at weekly evening screenings is required.

222c. Images of America in Film. Spring 1994. Ms. WELSCH.

Explores American culture and history by looking at studio- and independently produced films. Topics include sex and race relations; ethnicity and the American Dream; work and money and their roles in self-definition; war and nostalgia; and celebrity and the role of Hollywood in the national imagination. Directors may include Coppola, Ford, Malick, Hitchcock, Hawks, Minnelli, Lee, Wyler, Welles, and Altman. Attendance at weekly evening screenings is required.

221c. German Expressionism and Its Legacy. Fall 1994. Ms. WELSCH.

Considers the flowering of German cinema during the Weimar Republic and its enormous impact on American film. Examines work produced in Germany from 1919 to 1933, the films made by German expatriates in Hollywood after Hitler's rise to power, and the wide influence of the expressionist tradition in the following decades. Films include *The Golem*, *The Cabinet of Dr. Caligari*, *Nosferatu*, *Metropolis*, *The Last Man*, *M*, *Citizen Kane*, *The Woman in the Window*, *The Night of the Hunter*, *Blade Runner*, *Rumblefish*, *Kiss of the Spider Woman*, and *Paperhouse*. Attendance at weekly evening screenings is required.

224c. The Films of Alfred Hitchcock. Spring 1995. Ms. WELSCH.

Considers the films of Alfred Hitchcock from his career in British silent cinema to the Hollywood productions of the 1970s. Examines his working methods and style of visual composition as well as his consistent themes and characterizations. Of particular interest are his adaptation of Daphne DuMaurier's *Rebecca* as a way of exploring the tensions between literary sources and film, and between British and American production contexts. Ends with a brief look at Hitchcock's television career and his influence on recent film. Attendance at weekly evening screenings is required.

First-Year Seminars

The purpose of the first-year seminar program is to introduce college-level disciplines and to contribute to students' understanding of the ways in which a specific discipline may relate to other areas in the humanities, social sciences, and sciences. A major emphasis of each seminar will be placed upon the

improvement of students' skills—their ability to read texts effectively and to write prose that is carefully organized, concise, and firmly based upon evidence. Students who have particular difficulty with writing will be identified by the Deans' Office and will be advised to enter special tutorial classes.

Each year a number of departments offer first-year seminars. Enrollment in each is limited to 16 students. Sufficient seminars are offered to ensure that every first-year student will have the opportunity to participate during at least one semester of the first year. Registration for the seminars will take place before registration for other courses, to facilitate scheduling. A complete listing of first-year seminars being offered in the 1993–94 academic year follows:

Anthropology 19b,d. Women's Lives in South Asia. Spring 1994.

Ms. DICKEY.

Considers the identities and experiences of women in South Asia (especially India, Pakistan, and Sri Lanka). Issues examined include family and gender roles, sexuality, religion, health, legal codes, labor and class, and women's writing. Emphasis is placed on the complexities of studying and understanding the lives of women in other cultures. (Same as **Asian Studies 19.**)

Art 10c. Abstraction and Commodification in Contemporary Art.

Fall 1993. MR. LUTCHMANSINGH.

Examines imagery of post-World War II American art which veers between the apparent opposites of abstraction and direct objectification. Abstraction shifts attention away from objective reference to emphasize relations internal to the work of art or to offer functional parallels of subjective experience. Direct objectification uses representative imagery or actual deployment of concrete objects, sometimes commonplace and commercial and sometimes fantastic. Examples: abstract expressionism, minimalism, current abstraction, and pop art and recent developments. No previous knowledge of the topic is required.

Art 11c. Painting and Poetry: Greek Mythology. Spring 1994.

Ms. WEGNER.

Examines the idea of painting as silent poetry in the Western tradition from Greek vase painting through Renaissance treatments of myth and allegory, and on into nineteenth-century romanticism and twentieth-century rediscoveries of myth in painting. Emphasis on the epic tradition of Greek narrative and myth as interpreted through the centuries. Artists and writers to be studied include Homer, Ovid, Virgil, Michelangelo, Gentileschi, Rubens, Kauffman, David, Picasso, and Kahlo.

Asian Studies 19b,d. Women's Lives in South Asia. Spring 1994.

Ms. DICKEY.

(Same as **Anthropology 19.**)

Asian Studies 23c,d. The First Emperor of China. Spring 1995.

MR. SMITH.

(Same as **History 23.**)

[**Biology 11a. Ancient Biology and Medicine.**]

Classics 14c. Ancient Comic Traditions Fall 1993. MR. HALL.

An examination of Greek and Roman comedy and of some Renaissance and modern counterparts, concentrating on enduring character-types and on the resolution of social disharmony. Authors include Aristophanes, Menander, Plautus, Shakespeare, Jonson, Molière, and Wilde.

[**Computer Science 10a. Computers, Society, and Thought.**]

Economics 18b. Sustainable Development: Economics and the Environment. Fall 1993. MR. VAIL.

Investigates the stresses that economic growth puts on the long-term carrying capacity of the earth's resources. Explores the combined potential of public policy, market mechanisms, technological innovation, and personal behavior modifications to insure long-term sustainability. The contribution of economic analysis to understanding environmental degradation and proposing effective remedies is a central focus.

English 10c. Entering Nature. Fall 1993. MR. BURROUGHS.

A survey of attempts to re-encounter, redefine, and regain the natural world. Writers include Thoreau, Dillard, Fowles, and Abbey.

English 11c. Unspeakable Sexualities. Fall 1993. MR. COLLINGS.

Examines the intersection of various "unnatural" or unspeakable sexualities with the discourses of latency and excess, the monstrous and the vampiric, the exotic and the decadent, in nineteenth-century literature. Authors may include Coleridge, Keats, Mary Shelley, Emily Brontë, Melville, Wilde, Stoker, and Freud, with supplemental readings in literary, feminist, queer, and psychoanalytic theory.

English 12c. Contemporary Fiction. Fall 1993. MS. GOODRIDGE.

Readings of short stories and novels by Deborah Eisenberg, Elizabeth Jolley, Laurie Colwin, Ellen Cooney, Edna O'Brien, Toni Morrison, and Gloria Naylor.

English 13c. Gender, Class, and Comedy in American Film, 1933-1983. Fall 1993. MR. LITVAK.

Considers Hollywood comedies not just as entertainment but as intelligent and provocative commentaries on the politics of gender and class in American culture. Films include *Duck Soup* (1933), *She Done Him Wrong* (1933), *It Happened One Night* (1934), *Bringing Up Baby* (1938), *The Lady Eve* (1941), *Adam's Rib* (1949), *All About Eve* (1950), *Some Like It Hot* (1959), *The Apartment* (1960), *The Graduate* (1967), *Annie Hall* (1977), *Tootsie* (1982), and *Trading Places* (1983). Extensive readings in film

criticism and theory. In addition to regular class sessions, *required* evening screenings.

English 14c. Movements and Manifestoes: Modernism in London and New York. Fall 1993. Ms. MUTHER.

Examines a spectrum of modernist “moments”: Bloomsbury, Imagism, Vorticism, the Harlem Renaissance, and others. Considers little magazines and art propaganda in the context of major works. Writers include Woolf, Lawrence, H. D., Pound, Eliot, Moore, Williams, DuBois, Hughes, and Hurston.

English 15c. Satire. Fall 1993. MR. REDWINE.

Examines different methods and objects of satire in works of Sir Thomas More, Shakespeare, Jonson, Voltaire, Swift, Butler, Twain, Huxley, and Orwell.

English 16c. “When Do We Live? That’s What I Want to Know.”

Fall 1993. MR. WATTERSON.

Anglo-American School Fiction: Traces the origin and evolution of the genre in Victorian England and its early importation into the United States. Topics for consideration include adolescence and institutional authority, friendship and bonding, and middle-class readership. Novels by Hughes, Waugh, Benedictus, Campbell, Knowles, Salinger, and others, as well as nonfictional accounts, autobiographies, and readings in social history and literary criticism. Selected films are also screened and serve as a basis for discussion and writing assignments.

English 20c. The Contemporary Essay. Spring 1994. MR. BURROUGHS.

The revival of the personal essay has been a notable feature of recent American writing. The form is no doubt attractive in part because it eludes definition and allows for a wide range of generic influences. Students write essays in the form, as well as essays about it.

English 21c. Literature and Medicine. Spring 1994. Ms. DIEHL.

A study of narratives that focus upon issues associated with health and illness. We analyze works that deal with medical conditions in order to explore the ways in which these works construct stories that inform our understanding of the process of diagnosis, therapy, and “cure.” Readings include works by Oliver Sacks, Albert Camus, Susan Sontag, Raymond Carver, and Paul Monette.

English 22c. Twentieth-Century Autobiographical Writing. Spring 1994. Ms. GOODRIDGE.

Emphasis on autobiographies, journals, letters, and memoirs as a way of assessing the strategies and functions of “self-fashioning” in the twentieth century. Writers include Woolf, Bryher, H.D., Bishop, Nabokov, Hellman, Benjamin, Barthes, and Sontag.

English 23c. *Film Noir*. Spring 1994. Ms. KIBBIE.

A survey of the film genre, from the 1940s to the 1990s. Films include *The Maltese Falcon*, *The Big Sleep*, *The Killers*, *Gun Crazy*, *Chinatown*, and *Blade Runner*. We also read the novels and short stories adapted for the screen.

English 24c. Drama. Spring 1994. MR. REDWINE.

Emphasis on the close reading and discussion of plays by Shakespeare, Molière, Ibsen, Shaw, Beckett, and others.

[**Geology 17a. The Maine Coast: Present, Past, and Future.**]

History 11c. Women in Britain and America, 1750–1920. Spring 1994. Ms. McMAHON.

A comparative examination of the contribution of women to and the consequences for women of “modernization.” Topics include industrialization and the varieties of employment for women, Victorian culture and domesticity, and women’s rights and woman suffrage. Relies heavily on primary sources: letters, diaries, essays, prescriptive literature, fiction; secondary sources are used as guides in the reading of those contemporary sources. Designed to teach students how to subject primary and secondary source materials to a critical analysis.

History 14c. Childhood in Modern Europe. Spring 1994. MR. SCHECK.

Introduces various approaches to childhood in history. Discusses the thesis of the “invention” of childhood as a distinctive period of life in early modern Europe as well as speculations about its “disappearance” at the age of mass television and videos. Focuses on the problem of “knowing” about children’s experience in the past within changing family structures and social contexts.

History 15c. Three British Revolutions. Fall 1993. MR. HALLIDAY.

Regicide in 1649, invasion in 1688, warfare in America in 1776: three revolutions in British politics in little over a century. We examine the background of each, emphasizing political debate, how it changed and how it stayed the same from one revolution to the next. We conclude with arguments for American independence in a British context. Extensive readings from the period show how contemporaries justified or condemned political change.

History 16c,d. Social Change in Africa. Fall 1993. MR. MANCHUELLE.

An exploration of social change in African history in both the precolonial and modern periods. Topics include trade and labor migration, the role of the state, the impact of commercial agriculture, urbanization, slavery, class, gender, and the cultural and political effects of social change.

History 17c,d. The Cuban Revolution. Fall 1994. MR. WELLS.

The Cuban Revolution recently celebrated its thirtieth anniversary. This seminar offers a retrospective of a revolution entering “middle age” and its prospects for the future. Topics include U.S.-Cuban relations, economic and

social justice versus political liberty, gender and race relations, and literature and film in a socialist society.

History 19c. The Progressive Movement: Ca.1890–ca.1920. Spring 1994. MR. LEVINE.

The rapid pace of industrial development and urbanization produced strains and experimentation in American society, politics, law, and social relations. The seminar explores what is really the change to twentieth-century American civilization.

History 20c. In Sickness and in Health: Public Health in Europe and the United States. Fall 1995. MS. TANANBAUM.

Introduces a variety of historical perspectives on illness and health. Considers the development of scientific knowledge, and the social, political, and economic forces that have influenced public health policy. Topics include epidemics, maternal and child welfare, AIDS, and national health care.

History 21c,d. African Identities. Fall 1994. MR. MANCHUELLE.

Explores the various identities that have held the loyalty of Africans, often concurrently, from the precolonial to the modern period. Topics include the identities of clan, village, caste, class, gender, and kingdom, colonial assimilation policies, Pan-Africanism, and ethnic nationalisms.

History 23c,d. The First Emperor of China. Spring 1995. MR. SMITH.

In 222 B.C.E. the First Emperor ended 300 years of civil war to found a Chinese empire that was to last until the early years of this century. How could this have occurred? We examine art, archaeology, literature, politics, and philosophy to create a complex historical portrait of this momentous development. (Same as **Asian Studies 23.**)

History 25c. Popular Culture of the 1980s and 1990s. Spring 1994. MR. SMITH.

Emphasis on recent developments in music, television, and film. Introduces students to a variety of theoretical tools for the analysis of culture, including critical theory and neo-Marxist approaches.

Music 10c. Juliets, Romeos, and Sally Bowles: Love in Society.

Spring 1994. MR. MCCALLA.

In the last two centuries, Shakespeare's *Romeo and Juliet* has been the basis for many musical retellings, more or less close to the original: a "Dramatic symphony" (Berlioz); at least three operas (Bellini, Gounod, Delius); an orchestral "Overture-Fantasy" (Tchaikovsky); a ballet (Prokofiev); and the musical *West Side Story* (Bernstein). The class begins with the Shakespeare play and moves on to discussions of these later versions, with special attention to dramatic focus, characterization, and narrative through music.

As a counterexample to *Romeo and Juliet*, the class takes up Christopher Isherwood's *Berlin Stories* and then goes on to work derived from it: the play

and film *I Am a Camera*, the Broadway musical *Cabaret*, and the movie musical *Cabaret*.

No previous knowledge of music is expected.

Philosophy 11c. Free Will. Fall 1994. MR. CORISH.

Are our actions free, or at least partly free; or are they wholly caused, or determined, in some sense that makes the notion of freedom inappropriate in descriptions of actions? Are we really responsible agents, as our tradition tells us we are? Readings in contemporary and older materials are used as the basis for the seminar discussions.

Philosophy 12c. The Mind-Body Problem. Fall 1993. MR. SEHON.

Explores certain central questions in the philosophy of mind: What is the fundamental nature of mental states? What is the relationship between the mental and the physical? Can there be a science of the mind, and if so, what is its status relative to other sciences? Readings from historical and contemporary sources.

Philosophy 14c. Skepticism. Fall 1993. Fall 1994. Fall 1995. MR. STUART.

The skeptic denies that knowledge is possible. We first consider the “global” skepticism of the ancient Greek philosopher Sextus Empiricus, then turn to various “local” skepticisms: skepticism about the veridicality of perception (i.e., the dreaming argument), the existence of the external world, the existence of other minds, and so on. Readings from both historical and contemporary sources, e.g., Hume, Mill, Moore, Russell, Malcolm, Mackie, and Stroud.

[Philosophy 15c. Self and Self-Knowledge.]

[Philosophy 16c. Moral Problems.]

Physics 19a. Autobiography in Science. Spring 1994. MR. HINELINE.

Examines accounts of scientists’ lives and research as recounted against a backdrop of communities of scientists and laypersons. Critical readings of personal narratives by Darwin, Watson, Feynman, Dyson, and others are used to explore the structures and intents of the stories that scientists tell themselves, their peers, and a broader, “lay” public.

Religion 12c,d. Building the World: Mythologies and Societies.

Fall 1993. MS. SOIFER.

How do myths give meaning, value, and structure to a culture’s vision of human nature, society, and the cosmos? We draw on mythologies from Native American, Amazonian, Melanesian, Asian, and African cultures to explore this question. Readings in field work recorded by anthropologists and historians of religion as well as methodological examinations of myth inform the study.

Geology

Professor

Arthur M. Hussey*, *Chair*

Associate Professor

Edward P. Laine

Assistant Professor

Peter D. Lea

Visiting Instructor

David P. West, Jr.

Requirements for the Major in Geology

The major consists of the following core courses: **Geology 101, 102, 201, 211, and 241**; and no fewer than four courses from the following electives: **Geology 221, 222, 250, 256, 262, 265, 270, and 278**. **Geology 101** and **102** should be taken during the first year. **Geology 100** ordinarily will not count toward the major except as approved individually by the department for exceptional circumstances. Majors are advised to take **Chemistry 109**, and either **210** or **240**; **Physics 103**; and **Mathematics 171** by the end of their junior year. A field trip is taken during the spring vacation to illustrate the varied aspects of the geology of selected areas of the United States. All geology majors, coordinate majors, and interdisciplinary majors are required to participate in at least one of these trips during their junior or senior year.

Students interested in majoring in geology should consult with the chair of the department as soon as possible, preferably in their first year.

Interdisciplinary Majors

The department participates in formal interdisciplinary programs in geology and physics and in geology and chemistry. See page 127.

Requirements for the Minor in Geology

The minor consists of two courses chosen from **Geology 100, 101, and 102**, and two courses chosen from **Geology 201, 211, 221, 222, 241, 250, 256, 262, 265, 270, and 278**.

[17a. **The Maine Coast: Present, Past, and Future.**]

[50a. **Geology of Ocean Basins and Margins.**]

100a. Introduction to Environmental Geology. Fall 1993. MR. LEA.

An introduction to aspects of geology that affect the environment and land use. Topics include floods and surface-water quality, ground-water contamination, coastal processes and sea-level rise, and climatic change. Weekly laboratory and field trips emphasize local examples: Maine rivers, lakes, and coast.

Enrollment limited to 12 students.

101a. Introduction to Physical Geology. Every semester. Fall 1993.

MR. HUSSEY. Spring 1994. MR. LEA.

The composition and structure of the earth and the dynamic equilibrium processes that shape the surface of the earth. Field and indoor laboratory

studies include the recognition of common rocks and minerals, the interpretation and use of topographic and geologic maps, and dynamics of processes that shape our landscape. Three lectures and one three-hour laboratory per week. No previous experience in science courses is assumed.

102a. Introduction to Historical Geology. Every spring. MR. HUSSEY.

The principles involved in the interpretation of geologic history from the rock record and a review of the evolution of the earth and its inhabitants. Laboratory work includes the recognition of fossils and their modes of preservation, interpretation of geologic maps, and the geologic history of the principal tectonic belts of North America. Three hours of lecture, one three-hour laboratory per week, and a weekend field trip.

Prerequisite: **Geology 101** or permission of the instructor.

115a. Introduction to Environmental Sciences. Every spring.

MR. GILFILLAN.

An interdisciplinary introduction to the environmental sciences. Course material includes surficial and environmental geology and marine and aquatic ecology. In addition to classroom work, there are weekly sessions of laboratory work or field work that focus on local environmental problems. (Same as **Environmental Studies 115**.)

Prerequisite: **Environmental Studies 101** or permission of the instructor. Enrollment limited to 25 students; preference given to students intending to major in either geology or environmental studies.

[**121a. Arctic Landscapes.**]

201a. Earth Materials. Spring 1995. Spring 1997. MR. HUSSEY.

The identification, classification, origin, manner of occurrence, and uses of the principal rock-forming and economic minerals; hand specimen identification of igneous, metamorphic, and sedimentary rocks, and sediment types. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Geology 101**, or **Chemistry 109**, or **Physics 103**.

211a. Optical Mineralogy and Crystallography. Fall 1993. Fall 1995.

MR. HUSSEY.

A study of the crystallography of minerals and the optical principles and methods of mineral identification using the polarizing microscope. Laboratory work includes the examination and identification of minerals in thin section and as grains in immersion oils using the polarizing microscope; elementary morphological crystallography. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Chemistry 109**, or **Geology 101**, or **Physics 103**.

221a. Sedimentology. Fall 1993. Fall 1995. Mr. LEA.

An examination of sedimentary processes and the composition of sedimentary rocks. Process-related topics include the behavior of sediment-moving fluids, dynamics of sediment transport and deposition, and interpre-

tation of depositional processes from sedimentary structure and texture. Petrologic topics include identification of sediments in hand specimen and thin section, and diagnosis of sedimentary rocks. Three hours of lecture and one three-hour laboratory per week. Includes local field trips.

Prerequisites: **Geology 101** and **Physics 103**, or permission of the instructor.

222a. Stratigraphy and Depositional Systems. Spring 1994. Spring 1996. MR. LEA.

Survey of the earth's depositional systems, both continental and marine, with emphasis on interpretation of sedimentary environment from sedimentary structures and facies relationships; stratigraphic techniques for interpreting earth history; and introduction to subsurface analysis of sedimentary basins. Three hours of lecture and one three-hour laboratory per week. Includes local field trips during laboratory periods and a possible three-day trip over spring break.

Prerequisite: **Geology 221** or permission of the instructor.

241a. Structural Geology. Fall 1994. Fall 1996. MR. HUSSEY.

The primary and secondary structures of rocks, and the interpretation of crustal deformation from these features. Laboratory work includes strain analysis, field techniques, structural interpretation of geologic maps, construction of cross sections, and the use of stereographic projections and orthographic constructions in the solution of structural problems and data presentation. Three hours of lecture and one three-hour laboratory per week. Frequent field trips during laboratory periods and weekends.

Prerequisite: **Geology 101**, or **Geology 100** with permission of the instructor.

250a. Marine Geology and Tectonics. Spring 1995. Spring 1997. MR. LAINE.

Examines the geological and geophysical bases of the plate tectonics model. The influence of plate tectonics on major events in oceanographic and climatic evolution. Deep-sea sedimentary processes in the modern and ancient ocean as revealed through sampling and remote sensing. Focus in the laboratory on the interpretation of seismic reflection profiles from both the deep ocean and local coastal waters. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Geology 101**.

256a. Environmental Geology. Every fall. Fall 1993. MR. LAINE.

The application of geological and geomorphological principles to the understanding and solution of contemporary and future land-use issues. Principles are mastered through both lectures and the reading of case studies. Field exercise emphasizes observation, mapping, and analysis of geologic information relative to local environmental problems.

Prerequisite: **Geology 101** or permission of the instructor.

262a. Igneous and Metamorphic Petrology. Spring 1994. Spring 1996.
MR. HUSSEY.

The classification, description, and genesis of the common igneous and metamorphic rock types. Laboratory work is devoted to the identification of rocks in hand specimen and examination of thin sections with the use of the polarizing microscope. Three hours of lecture and one three-hour laboratory per week. Weekend field trip during April.

Prerequisite: **Geology 211.**

265a. Geophysics. Spring 1994. Spring 1996. Mr. LAINE.

An introduction to interpretation methods in geophysics. Topics include seismic reflection and refraction methods, gravity and magnetic modeling, and electrical and thermal prospecting. Specific applications of each of these methods are drawn from the fields of marine geophysics, regional geology, hydrology, and environmental geology. No formal lab is given, but students should expect to spend several full Saturdays in the field making geophysical observations.

Prerequisites: **Physics 103, Mathematics 161,** and one of the following—**Geology 101, Physics 223, or Physics 227.**

270a. Geomorphology. Fall 1994. Fall 1996. Mr. LEA.

The concepts of landform development, emphasizing the relationships between surficial processes and form. Topics include work of streams, waves, wind, and glaciers; climatic geomorphology; and historical aspects of landscape development. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Geology 101** or permission of the instructor.

278a. Glacial and Quaternary Geology. Spring 1995. Spring 1997.

An examination of methodologies for Quaternary environmental and climatic reconstruction; the geologic record of cyclic Quaternary environmental and climatic change, and implications for the earth's future; Quaternary glacial and periglacial systems, sea-level fluctuations, paleoclimatic records of ocean sediments and glacier ice; stratigraphy and dating methods; response of plant and animal communities to environmental change; and theories of climatic change.

Prerequisite: **Geology 101** or permission of the instructor.

290a. Intermediate Independent Study. THE DEPARTMENT.

400a. Advanced Independent Study and Honors. THE DEPARTMENT.

German

Professors

Helen L. Cafferty*
 Steven R. Cerf, *Chair*
 James L. Hodge

Assistant Professor

Kathleen O'Connor
Teaching Fellow
 Michaela Keil

Requirements for the Major in German

The major consists of seven courses, of which one may be chosen from **51**, **52** and the others from **205–402**. Prospective majors, including those who begin with first- or second-year German at Bowdoin, may arrange an accelerated program, usually including study abroad. Majors are encouraged to consider one of a number of study-abroad programs with different calendars and formats.

Requirements for the Minor in German

The minor consists of **German 102** or equivalent, plus any four courses, of which two must be in the language (**203–398**).

51c. German Literature and Culture in English Translation. Every fall.

Enrollment limited to 50 students. This course may be repeated for credit with the contents changed.

The History of German Film. Fall 1993. Ms. O'CONNOR.

German film from expressionism to the New German Cinema, 1920–1990. Focus on historical context and aesthetic principles of film production and reception. Directors may include Lang, Murnau, Wiene, Riefensthal, Herzog, Fassbinder, Wender, Sanders-Brahms, and von Trotta. Required attendance at evening film screenings. Films will have English subtitles. Readings and discussions in English.

52c. Myth and Heroic Epic of Europe. Spring 1995. MR. HODGE.

Myths, legends, sagas, and other folk literature of the Germanic, Celtic, Slavic, and Finno-Ugric traditions, e.g., the prose and poetic Eddas, Song of the Volsungs, Beowulf, Lay of the Nibelungs, the Mabinogion, the Cycle of Finn, the Cycle of Ulster, Marko the Prince, and the Kalevala. Where possible and desirable, comparisons may be drawn with other mythologies; mythological and legendary material may be supplemented by relevant folkloric, Arthurian, and semihistorical literature. *Taught in English.*

101c, 102c. Elementary German. Every year. Fall 1993. MR. HODGE. Spring 1994. MR. CERF.

German 101 is the first language course in German and is open to all students without prerequisite. Three hours per week of training in grammar, speaking, composition, and reading. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available. The course requires regular quizzes and a final examination.

203c, 204c. Intermediate German. Every year. Fall 1993. MR. CERF. Spring 1994. Ms. CAFFERTY.

Three hours per week of reading, speaking, composition, and review of grammar. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.

Prerequisite: **German 102** or equivalent.

205c. Advanced German Language. Every year. Fall 1993. Ms. O'CONNOR.

Designed to increase oral fluency, compositional skills, and understanding of spoken German. Stylistics and idiomatic usages may be emphasized.

Prerequisite: **German 204** or equivalent.

308c. Introduction to German Literature. Every year. Spring 1994.

MR. HODGE.

Introduction to methods of interpretation and critical analysis of works of German literature by genre: e.g., prose fiction, expository prose, lyric poetry, drama, opera, film, etc. Develops students' sensitivity to literary structures and techniques and introduces terminology for describing and analyzing texts.

Prerequisite: **German 204** or equivalent.

313c. The Development of Literary Classicism. Fall 1993. MR. HODGE.

Begins with the reaction against the Age of Reason and continues into the later works of Goethe and Schiller.

Prerequisite: **German 204** or equivalent.

314c. The Romantic Movement. Spring 1994. MR. CERF.

Its literary philosophy, several schools of thought, and preferred genres, including consideration of such representative or influential figures as Tieck, W. and F. Schlegel, Kleist, Arnim, Brentano, Chamisso, Eichendorff, E. T. A. Hoffmann, and Schopenhauer.

Prerequisite: **German 204** or equivalent.

315c, 316c. Literature of the Nineteenth and Twentieth Centuries.

Fall 1994, spring 1995. THE DEPARTMENT.

German literature from approximately 1830 to 1945. Such authors as Hebbel, Storm, Meyer, Keller, Hauptmann, Hofmannsthal, Mann, Kafka, and Brecht are included.

Prerequisite: **German 204** or equivalent.

317c. German Literature since 1945. Fall 1994. THE DEPARTMENT.

Representative postwar authors from Germany, Austria, and Switzerland.

Prerequisite: **German 204** or equivalent.

319c. The Short Prose Form. Fall 1993. MR. CERF.

Unique theory, form, and content of the German Novelle as it has developed from Goethe to the present.

Prerequisite: **German 204** or equivalent.

398c. Seminar in Aspects of German Literature and Culture.

Every spring. THE DEPARTMENT.

Work in a specific area of German literature not covered in other departmental courses, e.g., individual authors, literary movements, genres, cultural influences, and literary-historical periods. This course may be repeated for credit with the contents changed.

Prerequisite: **German 204** or equivalent.

East German Literature and Culture. Spring 1994. Ms. CAFFERTY.

Examines the literature and literary culture unique to the German Democratic Republic, with attention to the cultural politics of German unification. Among areas covered are the political and historical context, socialist tradition in the arts, *Kulturpolitik* and censorship, socialist realism, interpretations of myth and history as socialist struggle (Sisyphus, Icarus, the Spanish Civil War, Thomas Münzer), socialist tragedy, the individual versus the collective, the evolving role of literature in GDR society, the debate on the role of the artist in East Germany, conformity versus resistance, utopian socialism versus *realexistierender Sozialismus*. Authors include Brecht, Seghers, Biermann, Planzendorf, Müller, Wolf, Braun, and others.

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Government and Legal Studies

Professor Emeritus

John C. Rensenbrink

Professors

Charles R. Beitz

Richard E. Morgan, *Chair*

Christian P. Potholm

Jean Yarbrough

Associate Professors

Janet M. Martin

Allen L. Springer

Assistant Professors

Shaheen Ayubi

Paul N. Franco†

Marcia A. Weigle

Visiting Assistant Professor

John Calabrese

Senior Lecturer

Kent John Chabotar

Requirements for the Major in Government and Legal Studies

Courses within the department are divided into five fields: American government (**Government 200, 201, 202, 203, 204, 210–211, 250, 270, 301, 302, 304, and 341**), comparative politics (**Government 223, 224, 225, 226, 227, 230, 235, 275, 280, 281, 320, 321, 360, and 362**), political theory (**Government 225, 240, 241, 242, 243, 244, 250, 255, 268, 341, 342, 343, and 344**), international relations (**Government 226, 227, 235, 260, 261, 270, 271, 275, 280, 282, 283, 284, 361, 362, and 363**), and public policy (**Government 203, 204, 210–211, 215, 255, 270, 275, 301, 304, and 341**). Every major is expected to complete an area of concentration in one of these fields.

The major consists of one Level A course, six Level B courses, and one Level C course, distributed as follows:

1. A field of concentration, selected from the above list, in which at least two Level B courses and one Level C course are taken.
2. At least one Level B course in each of three fields outside the field of concentration.
3. Students seeking to graduate with honors in government and legal studies must have an excellent academic record. Interested students should contact the honors director for specific details. Students must prepare an honors paper, which is normally the product of two semesters of independent study work, and have that paper approved by the department. One semester of independent study work may be counted toward the eight-course departmental requirement and the three-course field concentration.

Requirements for the Minor in Government and Legal Studies

A minor in government and legal studies will consist of one Level A course and four Level B courses from three of the departmental subfields.

LEVEL A COURSES

Introductory Seminars

Topics and course requirements will vary from seminar to seminar and year to year according to the interests of the instructor. All are designed to provide an introduction to a particular aspect of government and legal studies. Students are encouraged to analyze and discuss important political concepts and issues, while developing research and writing skills.

Enrollment is limited to 20 students in each seminar. First-year students are given first priority; sophomores are given second priority. If there are any remaining places, juniors and seniors may be admitted with the permission of the instructor.

Fall 1993

[101b. Comparative Politics.]

102b. Caribbean Forms. MR. POTHOLM.

A look at the political landscape of the Caribbean Basin, with particular emphasis on the survival of polyarchal forms in the region, and a comparison of political ingredients found in a number of situations. Some relevant examples to be studied are Barbados, Trinidad, Haiti, Jamaica, Puerto Rico, and Grenada.

103b. The Pursuit of Peace. MR. SPRINGER.

Examines different strategies for preventing and controlling armed conflict in international society, and emphasizes the role of diplomacy, international law, and international organizations in the peace-making process.

105b. American Politics: Representation, Participation, and Power.

Ms. MARTIN.

An introductory seminar in American national politics. Readings, papers, and discussion explore the changing nature of power and participation in the American polity, with a focus on the interaction between individuals (non-voters, voters, party leaders, members of Congress, the president) and political institutions (parties, Congress, the executive branch, the judiciary).

106b. Aspects of Political Theory. Ms. YARBROUGH.

Introduces the fundamental issues of political life: What is justice? What is happiness? Are human beings equal or unequal? What is the relationship between private property and liberty? Private property and justice? Are there moral standards that are prior to law? If so, where do they come from? Nature? History? Readings include works of Plato, Aristotle, Machiavelli, Locke, Marx, and Nietzsche, and the Bible.

[108b. Liberalism Ancient and Modern.]**109b. Sources and Types of Conflict in International Society.**

Mr. CALABRESE.

An examination of why conflict occurs within and between states, with particular emphasis on conflict in the Middle East (e.g., the Iranian revolution, the Lebanese civil war, the Arab-Israeli conflict).

*Spring 1994***104b. Introduction to Comparative Politics.** Ms. WEIGLE.

A rigorous introduction to comparative politics through an examination of state-society relations, political linkages (parties, interest groups, social movements), and political culture. The class is based on an analysis of three sets of countries—liberal democracies (Europe), communist/post-communist systems (USSR/Russia), and authoritarian regimes (Latin America and Africa)—and is designed to develop skills in comparative political analysis.

105b. American Politics: Representation, Participation, and Power.

Ms. MARTIN.

An introductory seminar in American national politics. Readings, papers, and discussion explore the changing nature of power and participation in the American polity, with a focus on the interaction between individuals (non-voters, voters, party leaders, members of Congress, the president) and political institutions (parties, Congress, the executive branch, the judiciary).

107b. The Resurgence of the Islamic Religion and Politics. Ms. AYUBI.

An investigation into the nature and historical development of Islam to present times, with emphasis on the interaction between religion and politics in the Middle Eastern, African, and Asian countries.

Introductory Lectures**160b. Introduction to International Relations.** Spring 1994.

MR. SPRINGER AND MR. POTHOLM.

Identifies and explains patterns of interaction among nation-states. Focuses on developments since World War II, but many lectures draw on material from other periods. Such topics as the nature of humankind and the causes of war, revolutionary change, and the role of international law and organization are considered. Enrollment limited to 150 students.

LEVEL B COURSES

Level B courses are designed generally for students with a previous background in government and legal studies. All, unless otherwise noted, require that a student have taken a Level A course or have received the permission of the instructor. Course requirements will vary, but most courses at this level adopt a lecture format. All Level B courses are limited to 50 students.

[200b. Local Governments.]**201b. Law and Society.** Spring 1994. MR. MORGAN.

An examination of the American criminal justice system. Although primary focus is on the constitutional requirements bearing on criminal justice, attention is paid to conflicting strategies on crime control, to police and prison reform, and to the philosophical underpinnings of the criminal law.

Prerequisite: Junior standing.

202b. The American Presidency. Spring 1994. MS. MARTIN.

An examination of the presidency in the American political system, including presidential selection, advisory systems, the institutionalized presidency, and relations with Congress and the courts. Problems and techniques of presidential decision-making.

[203b. Elections, Parties, and Interest Groups in America.]**204b. Congress and the Policy Process.** Fall 1993. MS. MARTIN.

An examination of the U.S. Congress, with a focus on the congressional role in the policy-making process. Topics include recent changes in the budgetary process, congressional procedures and their impact on policy outcomes, and executive-congressional relations.

210b. Constitutional Law I. Every fall. MR. MORGAN.

The first semester deals with the development of American constitutionalism, the power of judicial review, federalism, and separation of powers.

Prerequisite: Junior or senior standing, or permission of the instructor.

211b. Constitutional Law II: Civil Rights and Liberties. Every spring. MR. MORGAN.

The second semester deals with questions arising under the First and Fourteenth Amendments.

Prerequisite: **Government 210.**

215b. Public Policy and Administration. Spring 1994. MR. CHABOTAR.

An introduction to governmental and nonprofit decision-making, with emphasis on strategic planning, fiscal and personnel administration, issues of public interest and merit system, and responses to bureaucratic, political, and economic pressures. Focus on policy-making in education, criminal justice, and the arts.

223b,d. African Politics. Fall 1993. MR. POTHOLM.

An examination of the underlying political realities of modern Africa. Emphasis on the sociological, economic, historical, and political phenomena that affect the course of politics on the continent. While no attempt is made to cover each specific country, several broad subjects, such as hierarchical and polyarchical forms of decision-making, are examined in depth. A panel discussion with African students and scholars is held at the end of the course.

224b. West European Politics. Fall 1993. MS. WEIGLE.

An examination of politics in the countries of Britain, France, Germany, Sweden, and Italy in four parts: trends in post-World War II European political development; European domestic politics (political system, political parties, interest groups, culture); European integration through the European Community; and special problems in post-Soviet Europe (nationalism, immigration, borders).

226b. Middle East Politics. Fall 1993. MS. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect Middle East political processes.

227b,d. Ethnicity and Politics in South Asia. Spring 1994. MS. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect the political processes in India, Pakistan, Bangladesh, and Sri Lanka. (Same as **Asian Studies 258.**)

230b. Russian Politics: The Road to Democracy? Fall 1993. MS. WEIGLE.

The first half of the course examines the roots of contemporary Russian politics in nineteenth-century Russian and twentieth-century Soviet political history. In the second half, we focus on the Gorbachev revolution and the explosive transition from the communist to the post-communist system. We analyze the mechanisms of political change in current Russian politics and ask if liberal democracy or authoritarianism will take root in the ashes of the Soviet system.

[**235b. Advanced Comparative Government.**]

240b. Classical Political Philosophy. Fall 1993. Ms. YARBROUGH.

Examines the answers of Greek and Roman political philosophers, as well as medieval theologians, to the most pressing human questions: What is the best way to live? What is the relationship of the individual to the political community? What is justice, and how important a virtue is it? Can we rely on human reason to give answers to these questions, or are the answers to our central human concerns ultimately dependent upon revelation and faith? If so, what are the political consequences?

241b. Modern Political Philosophy. Spring 1994. Ms. YARBROUGH.

Beginning with Machiavelli and Hobbes, modern political philosophy centers around the question of human freedom. This course explores the central problems to which the concern for freedom gives rise. In particular, it examines the overthrow of the classical horizon, the origin and meaning of rights, the relationship between liberty and equality, and the replacement of nature with history as the source of human meaning.

[243b. **Idealist Theories of the State: Rousseau to Hegel.**]

[244b. **Liberalism and Its Critics.**]

250b. American Political Thought. Spring 1994. Ms. YARBROUGH.

Considers the classic elements of the history of American political thought from the founding period to the present. The course does not attempt to cover every age or every thinker but aims instead for some depth on selected topics of debate between major American political thinkers. Concludes with an exploration of a variety of interpretations of the history of American intellectual and political thought.

255b. Approaches to Political Science: Quantitative Analysis in Political Science. Fall 1993. Ms. MARTIN.

An introduction to some of the methodological approaches used in studying political phenomena, including the use of quantitative methods. Topics include the benefits and limitations of various research methods, research design, development and evaluation of hypotheses, survey research, and an introduction to basic statistical analysis. Instruction in the use of computer-based statistical programs. (No prior experience in computing or statistical analysis is assumed or necessary.)

260b. International Law. Fall 1993. MR. SPRINGER.

The modern state system, the role of law in its operation, the principles and practices that have developed, and the problems involved in their application.

268c,d. Politics and History of Northeast Africa: The Latter Colonial to Post-Colonial Period. Fall 1993. MR. SELASSIE.

Late colonial government, the struggle for independence, and the problems of post-colonial Northeast Africa, an area including Ethiopia, the Sudan, Eritrea, and Somalia. Readings include works of historical analysis and novels by contemporary African authors. (Same as **History 268.**)

270b. American Foreign Policy: Its Formulation and the Forces Determining Its Direction. Spring 1994. MR. CALABRESE.

The major theories concerning the sources and conduct of American foreign policy since World War II. The approach emphasizes the interrelationship of political, social, and economic forces that shape U.S. diplomacy.

Prerequisite: Sophomore standing.

[271b. Soviet Foreign Policy.]

[275b,d. Advanced International Politics: Rich Nations/Poor Nations.]

[281b,d. Chinese Politics.]

(Same as Asian Studies 276.)

282b. "National Security" in Developing Countries. Fall 1993. MR. CALABRESE.

An examination of the different definitions of security in the Third World, as well as the sources and manifestations of insecurity at the individual state and regional levels.

283b. International Environmental Law and Organization.

Spring 1994. MR. SPRINGER.

An examination of the development of international law and organization in the area of global environmental protection. Topics include transboundary pollution, ocean dumping, and global climate change.

[284b,d. Chinese Foreign Policy.]

(Same as Asian Studies 277.)

290b. Intermediate Independent Study. THE DEPARTMENT.

LEVEL C COURSES

Level C courses provide seniors (and juniors, with the permission of the instructor) an opportunity to do advanced work within their fields of concentration. This may be done in the context of a seminar or through independent study with a member of the department, or through the honors seminar.

[301b. Advanced Seminar in American Politics: Reforming the Intelligence Agencies.]

302b. Colloquium in Law and National Security. Fall 1993. MR. MORGAN.

[304b. Advanced Seminar in American Politics: Presidential-Congressional Relations.]

320b. Advanced Seminar in Comparative Politics: Politics and Antipolitics in East Central Europe. Spring 1994. MS. WEIGLE.

[321b. Advanced Seminar in Comparative Politics: Democratization in Leninist Systems.]

- 322b. Advanced Seminar in Nationalism.** Spring 1994. MR. CALABRESE.
 [341b. Advanced Seminar in Political Theory.]
 [342b. Advanced Seminar in Political Theory.]
 [343b. Advanced Seminar in Political Theory: Contemporary Political Philosophy.]
- 344b. Aspects of Political Theory: Social Justice.** Spring 1994. MR. BEITZ.
- 360c,d. Problems of Development in Africa.** Fall 1993. MR. SELASSIE.
 Changing ideas of nationalism and economic and political structures in contemporary Africa. (Same as **History 360.**)
- 361b. Advanced Seminar in International Relations: Conflict Simulation and Conflict Resolution.** Spring 1994. MR. POTHOLM.
- 362b. Advanced Seminar in International Relations and Comparative Government: Terrorism.** Fall 1993. MS. AYUBI.
- 400b. Advanced Independent Study and Honors.** THE DEPARTMENT.

History

Professors

Daniel Levine, *Chair*

Paul L. Nyhus

Allen Wells

Visiting Professor

Bereket Habte Selassie

Associate Professors

John M. Karl†

Sarah F. McMahon

Kidder Smith

Randolph Stakeman

Assistant Professor

Susan L. Tananbaum†

Visiting Assistant Professors

François Manchuelle

Raffael Scheck

Visiting Instructor

Paul D. Halliday

Senior Lecturer

Kenneth A. Lewallen

Lecturer

Matthew M. Gardner, Jr.

Requirements for the Major in History

The departmental offerings are divided into the following fields: Europe (may be divided into two fields: Europe to 1715 and Europe since 1500), Great Britain, the United States, Asia, Africa, and Latin America. In meeting the field requirements, courses in Europe between 1500 and 1715 may be counted toward early or modern Europe but not toward both of them. At least one field must be in Asia, Africa, or Latin America. Students may, with departmental approval, define fields that are different from those specified above. The program chosen to meet the requirements for the major in history must be approved by a departmental advisor.

The major consists of ten courses, distributed as follows:

1. A primary field of concentration, selected from the above list, in which four or more courses are taken. One of the courses must be numbered in the 300s, selected with departmental approval, in which a research essay is written.

2. Two supplemental fields, in each of which two courses are taken.

3. In addition, each student must take two courses in fields outside history but related to his or her primary field of concentration. These courses might be taken, for example, in art history, government, English, any of the language departments, anthropology, sociology, and classics.

All history majors seeking departmental honors will enroll in at least one semester of the Honors Seminar (**History 451, 452**). Its primary requirement is the research and writing of the honors thesis. In addition, the seminar is to provide a forum in which the students, together with the faculty, can discuss their work and the larger historical questions that grow out of it.

With departmental approval a student may offer for credit toward the history major, college-level work in history at other institutions. This work may represent fields other than those that are available at Bowdoin. A student who anticipates study away from Bowdoin should discuss with the department, as early in his or her college career as possible, a plan for the history major that includes work at Bowdoin and elsewhere.

The first-year seminars listed under **History 10–25** are not required for the major, but such seminars may be counted toward the required ten courses.

Before electing to major in history, a student should have completed or have in progress at least two college-level courses in history.

History majors are encouraged to develop competence in one or more foreign languages and to use this competence in their historical reading and research. Knowledge of a foreign language is particularly important for students planning graduate work.

Each major must select a departmental advisor. A student should plan, in consultation with his or her advisor, a program that progresses from introductory to advanced levels. The courses numbered in the 300s presuppose a reasonable background understanding. They are open with the consent of the instructor to history majors and other students, normally juniors and seniors.

Enrollment in history courses numbered 50–299 is limited to 50 students each.

Requirements for the Minor in History

The minor consists of five courses, three to be taken in a field of concentration chosen from the list specified by the department for a major. The remaining two are to be in a subsidiary field selected from the same list.

East Asian Studies Concentration

Majors in history may elect the East Asian studies concentration, which consists of the following requirements: four courses in East Asian history, including at least one research seminar; two courses in a field of history other than East Asian; and four semesters of Chinese or Japanese language.

Foreign study for students interested in East Asian studies is highly recommended. Established programs in Hong Kong, Taiwan, Japan, and the People's Republic of China are available. Consult the instructor in East Asian history for information about various programs.

Course Selection for First-Year Students

Although courses numbered 10–25 and 101–102 are designed as introductory courses, first-year students may enroll in any courses numbered 201–279.

10–25. First-Year Seminars.

The following seminars are introductory in nature. They are designed for first-year students who have little background in history generally or in the period and area in which the particular topic falls. Enrollment is limited to 16 students in each seminar.

Objectives are (a) to cover the essential information relating to the topic, together with a reasonable grounding in background information; (b) to illustrate the manner in which historians (as well as those who approach some of the topics from the point of view of other disciplines) have dealt with certain significant questions of historical inquiry; and (c) to train critical and analytical writing skills.

The seminars are based on extensive reading, class discussion, oral reports, two or three short critical essays, and an examination.

For a full description of first-year seminars, see pages 94–100.

11c. Women in Britain and America, 1750–1920. Spring 1994. Ms. McMAHON.

14c. Childhood in Modern Europe. Spring 1994. MR. SCHECK.

15c. Three British Revolutions. Fall 1993. MR. HALLIDAY.

16c,d. Social Change in Africa. Fall 1993. MR. MANCHUELLE.

17c,d. The Cuban Revolution. Fall 1994. MR. WELLS.

19c. The Progressive Movement: Ca. 1890–ca. 1920. Spring 1994. MR. LEVINE.

20c. In Sickness and in Health: Public Health in Europe and the United States. Fall 1995. Ms. TANANBAUM.

21c,d. African Identities. Fall 1994. MR. MANCHUELLE.

23c,d. The First Emperor of China. Spring 1995. MR. SMITH.
(Same as **Asian Studies 23.**)

25c. Popular Culture of the 1980s and 1990s. Spring 1994. MR. SMITH.

103c,d. Asian Civilizations. Fall 1993. MR. SMITH.

An introduction to selected texts of South and East Asian civilizations, emphasizing Buddhist cultures in India, China, and Japan. Frequent short papers, several longer papers. (Same as **Asian Studies 101.**)

104c. History on Film. Fall 1994. MR. NYHUS.

Explores topics in Renaissance history as realized by important modern directors. Considers such topics as urban life, the peasant family, the late medieval monarchy, witchcraft, and imperialism and the New World, as well as issues of historiography. Films include *The Decameron* (Pasolini), *The Return of Martin Guerre* (Vigne), *The Seventh Seal* (Bergman), *Henry V* (the Olivier version of Shakespeare's play), *Day of Wrath* (Dreyer), and *Aguirre, the Wrath of God* (Herzog). Ancillary readings from a variety of sources.

105c. Medieval Spain. Every other year. Fall 1995. MR. NYHUS.

A survey of medieval Spain serving as an introduction to medieval studies. Reviews the many cultures—Visigothic, Islamic, Jewish, and Christian—that flourished in medieval Spain and the relations among these cultures.

131c,d. The Autobiography of African America. Fall 1993. MR. STAKEMAN.

A survey of African-American thought and experience as it is revealed through the autobiography, one of the first literary genres developed by African Americans. Works to be covered may include such classic autobiographies as *Narrative of the Life of Frederick Douglass*, Richard Wright's *Black Boy*, and *The Autobiography of Malcolm X*, among others. (Same as **Africana Studies 102.**)

[161b,d. The African Diaspora.]

(Same as **Africana Studies 101.**)

201c. Ancient Greece. Spring 1994. MR. NYHUS.

A survey of the political, social, and economic history of Greece from the second millennium B.C. through the Hellenistic period. Focus on the fifth century B.C. Extensive selections of Herodotus and Thucydides, as well as dramatists, poets, and philosophers.

203c. Europe in the Middle Ages, 1050–1300. Spring 1994. MR. NYHUS.

A survey covering political and social institutions as well as intellectual and cultural movements of Europe in the twelfth and thirteenth centuries.

207c. Culture and Society in Sixteenth-Century Europe. Fall 1993.

MR. NYHUS.

A survey of Europe in the sixteenth century paying equal attention to Mediterranean and northern societies. Special focus on the relation of literature, art, and music to the study of societies.

211c. Europe 1517–1715: Reformation to Louis XIV. Spring 1995.

MR. KARL.

The Reformation serves as introduction to the social, political, and intellectual development of continental Europe to the death of Louis XIV.

214c. Europe 1939 to the Present. Fall 1994. MS. TANANBAUM.

A survey of the last fifty years of European history, with a focus on the history of World War II, the origins of the cold war, the division of Europe, Eastern Europe under Stalinist rule, the revival of Western Europe, the

Western Alliance, and the political and economic development of Europe since 1945. Special attention is also paid to cultural trends in East and West.

215c. Nazi Germany. Fall 1994. MR. KARL.

After a brief survey of German development, considers the rise of National Socialism and concentrates on the character and nature of the Nazi dictatorship.

216c. Germany and Europe, 1900–1950. Fall 1993. MR. SCHECK.

A political and diplomatic history focusing on Germany's domestic development and her role in the international system. Examines strategies to avoid war and to enhance international cooperation. Emphasis also on the rise of fascism and communism.

217c. History of Russia to 1825. Spring 1995. MR. KARL.

A broad survey beginning with medieval Russia but concentrating on the rise of Muscovy, Peter the Great, and the development of autocracy and serfdom down to the Decembrist revolt.

218c. History of Russia: 1825 to the Present. Fall 1995. MR. KARL.

Begins with the reign of Nicholas I and focuses mainly on the long-term coming, course, and aftermath of the Revolution of 1917.

219c. European Politics, Culture, and Thought, 1815–1914.

Spring 1994. MR. SCHECK.

A survey of nineteenth-century Europe. Special focus on intellectual history from Hegel to Freud, political change, and *mentalités* in the context of industrial revolution, demographic explosion, and overseas expansion.

[220c. Judaism, Christianity, and Antisemitism.]

221c. A History of England, 1485–1689. Fall 1993. MR. HALLIDAY.

A political, cultural, and social survey of early modern England, from the accession of the Tudors to the revolution of 1688. Particular attention is paid to the political and religious upheavals of the Reformation in the sixteenth century and of the Civil War in the 1640s. Other topics include the age of Elizabeth, the rule of Oliver Cromwell, and the restoration of monarchy after 1660.

222c. The Rise of Great Britain, 1660–1832. Spring 1994. MR. HALLIDAY.

A survey of Britain in an age of vast economic and social change. Empire and radical politics arose while a conservative elite ruled and religion remained a central concern. Particular attention is paid to the problems of making England, Scotland, and Wales into one nation—Great Britain—after the Treaty of Union of 1707. Other topics include the growth of London and other cities, the rise of a consumer culture and the Hanoverian kings. Extensive use of essays, fictional works, and visual images from the age.

223c. History of England, 1837 to the 1990s. Fall 1994. MS. TANANBAUM.

A social history of modern Britain from the rise of urban industrial society in the mid-eighteenth century to the present. Topics include the impact of

the industrial revolution, acculturation of the working classes, the impact of liberalism, the reform movement, and Victorian society. Concludes with an analysis of the domestic impact of the world wars and of contemporary society.

229c. The Growth of the Welfare State in Britain and America: 1834 to the Present. Spring 1995. MR. LEVINE.

A study in the comparative history of the ideology and institutions of the welfare state in two countries that are similar in some ways but quite different in others. Readings in the laws, legislative debates, ideological statements, and economic and sociological analyses.

230c. Interpretations of American History. Spring 1994. MR. LEVINE.

Considers four or five topics from the American Revolution to the present, all related to social change, including the American Revolution, slavery, Jacksonian democracy, the cold war, and the philosophy of history. Students read different works on the same subject and in class discuss how and why historians come to different conclusions about the same subject. This course is particularly useful for history majors, since there is some explicit concentration on the philosophy of history and historiography. Nonmajors may find the course useful as a review survey of American history and for practice in reading analytically and writing critical essays. *Students should not buy books before the first class, since not all students will read each book.*

Open only to first- and second-year students, or by permission of the instructor.

231c. Social History of Colonial America, 1607–1763. Fall 1993.

MS. MCMAHON.

A study of the founding and growth of the British colonies in North America. Explores the problems of creating a new society in a strange environment; the effects of particular goals and expectations on the development of the thirteen colonies; the gradual transformation of English, African, and Indian cultures; and the later problems of colonial maturity and stability as the emerging Americans outgrew the British imperial system.

233c. American Society in the New Nation, 1763–1840. Spring 1994.

MS. MCMAHON.

A social history of the United States from the Revolutionary era through the age of Jackson. Topics include the social, economic, and ideological roots of the movement for American independence; the struggle to determine the scope of the Constitution and the shape of the new republic; the emergence of an American identity; and the diverging histories of the North, South, and West in the early nineteenth century.

239c. The Era of the Civil War and Reconstruction. Spring 1995.

MR. LEVINE.

Examines the period between about 1850 and about 1880. Emphasis on politics, economics, the Supreme Court, and, above all, race relations. Topics

include the rise of the Republican party, abolitionism, slavery as an institution and slave society, sectionalism, the war itself and its implications, the politics of Reconstruction, the Freedman's Bureau, and the establishment of a new basis for white domination.

240c. The United States since 1945. Fall 1993. MR. LEVINE.

Consideration of social, intellectual, political, and international history. Topics include the cold war; the survival of the New Deal; the changing role of organized labor; Keynesian, post-Keynesian, or anti-Keynesian economic policies; and the urban crisis. Readings common to the whole class and the opportunity for each student to read more deeply in a topic of his or her own choice. Preregistration limited to first- and second-year students. Others may enroll as room is available.

242c,d. A History of Pan-Africanism. Spring 1994. MR. MANCHUELLE.

A survey and discussion of historical attempts by people of African descent in Africa, the Americas, and Europe to unite their efforts. Reviews the works of Africanus Horton, Edward Blyden, J. E. Casely-Hayford, Marcus Garvey, I. T. A. Wallace-Johnson, Kwame Nkrumah, Aimé Césaire, Léopold Sédar Senghor, Valentin Mudimbe, and others.

243c. The Civil Rights Movement. Fall 1994. MR. LEVINE.

Concentrates on the period from 1954 to 1970 and shows how various individuals and groups have been pressing for racial justice for decades. Special attention is paid to social action groups ranging from the NAACP to the SNCC, and to important individuals, both well known (Booker T. Washington) and less well known (John Doar). Readings mostly in primary sources. Extensive use of the PBS video series "Eyes on the Prize."

(Same as **Africana Studies 241.**)

246c. Women in American History, 1600–1900. Spring 1995.

MS. MCMAHON.

A social history of American women from the colonial period through the nineteenth century. Examines the changing roles and circumstances of women in both public and private spheres, focusing on family responsibilities, paid and unpaid work, education, ideals of womanhood, women's rights, and feminism. Class, ethnic, religious, and racial differences—as well as common experiences—are explored.

[**247c. American Women in the Twentieth Century.**]

248c. Family and Community in American History. Fall 1995.

MS. MCMAHON.

Examines the American family as a functioning social and economic unit within the community from the colonial period to the present. Topics include gender relationships; the purpose of marriage; philosophies of child-rearing; demographic changes in family structure; organization of work and leisure time; relationships between nuclear families and both kinship and neighbor-

hood networks; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life.

[249c. **America's Working Women.**]

250c,d. History of Mexico. Fall 1995. MR. WELLS.

Traces the historical evolution of the United States' southern neighbor, Mexico. After a look at the pre-Hispanic past, Spanish settlement and colonization, and the chaotic nineteenth century, the course examines twentieth-century Mexico and its problems and prospects for the future. Topics include U.S.-Mexico relations, immigration and other "border" problems, the debt crisis, the oil syndrome, and the future of the PRI in Mexico.

252c,d. Colonial Latin America. Fall 1993. MR. WELLS.

Analyzes the formative stages of "traditional" Latin American society. Traces the development of the new culture brought about by the fusion of European, Native American, and African elements. Topics include ancient Indian civilizations; the transition from a conquest to a settler society; European institutions of domination and control (land, labor, and religion); the legacy of race mixture; tensions between Europe and the colonies; and the Wars of Independence.

255c,d. Modern Latin America. Spring 1994. MR. WELLS.

Traces the roots of revolutionary discontent in Latin America from a Latin American, as well as a North American, perspective. This topical survey of Latin American history, from its independence wars through the calamitous nineteenth century to the unstable 1980s, explores the following topics: neocolonialism, dictators and the role of the military, U.S.-Latin American relations, imperialism, and the internal/external dynamic of revolutionary movements in the hemisphere.

256c,d. Comparative Slavery. Fall 1994. MR. WELLS.

Examines the comparative evolution of slavery from ancient times through the nineteenth century. After a careful consideration of a number of reference points from the Old World—Ancient Greece, Rome, and Christianity—the bulk of the course investigates slavery in Latin America and the United States. Topics include the nature of slavery; slavery, power, and the legal process; the slave trade; the family; religion; rebellions and everyday forms of resistance; and abolition and its aftermath. (Same as **Africana Studies 256.**)

258c,d. Latin American Revolutions. Spring 1995. MR. WELLS.

Examines revolutionary change in Latin America from a historical perspective, concentrating on two successful revolutions, those of Cuba and Nicaragua, and one case of thwarted revolutionary action, in Chile. Popular images and orthodox interpretations are challenged and new propositions about these processes tested. External and internal dimensions of each movement are analyzed, and each revolution is discussed in the full context of the country's historical development.

259. The Modern Middle East: The Arab-Israeli Conflict. Spring 1995. MS. TANANBAUM.

A historical overview of the Middle East during the nineteenth and twentieth centuries. Focuses on the disintegration of the Ottoman Empire, the role of Islam, British rule in the region, Palestine, and Jewish and Arab nationalism, and ends with an analysis of the *intifada* and current prospects for peace.

261c,d. Precolonial Africa: Middle Ages to 1800. Fall 1994.

MR. MANCHUELLE.

A survey of the history of sub-Saharan Africa during the precolonial period, from the origins to the beginning of European colonial penetration ca. 1800, including developments in culture, society, politics, and foreign relations, especially with the Islamic and Western worlds. (Same as **Africana Studies 261.**)

263c,d. Francophone Africa. Fall 1993. MR. MANCHUELLE.

French-speaking Africa today comprises seventeen nations, and more than one-third of the territory of sub-Saharan Africa. Topics include the French assimilation policy, the emergence of modern Black politics in Senegal, negritude and contemporary cultural debates, the emergence of one-party states, and the recent democratization movement. Knowledge of French is not a prerequisite for the course.

[264c,d. Muslim Africa.]

[265c,d. Southern Africa and European Imperialism.]

267c,d. Modern Africa: 1800 to the Present. Spring 1994 and spring 1995. MR. MANCHUELLE.

A survey of the history of sub-Saharan Africa from 1800 to the present, including developments in culture, society, politics, and foreign relations, especially with the Islamic and Western worlds. (Same as **Africana Studies 267.**)

268c,d. Politics and History of Northeast Africa: The Latter Colonial to Post-Colonial Period. Fall 1993. MR. SELASSIE.

Late colonial government, the struggle for independence, and the problems of post-colonial Northeast Africa, an area including Ethiopia, the Sudan, Eritrea, and Somalia. Readings include works of historical analysis and novels by contemporary African authors. (Same as **Government 268.**)

270c,d. Chinese Thought in the Classical Period. Spring 1994.

MR. SMITH.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. (Same as **Asian Studies 270.**)

271c,d. The Material Culture of Ancient China. Fall 1995. MR. SMITH.

Addresses material culture in China from ca. 400 to 100 B.C., while the great unification of empire was occurring. Topics include what people ate;

how they wrote, fought, and built; how we know such things about them; and how this civilization can be compared with others. (Same as **Asian Studies 271.**)

274c,d. Chinese Society in the Ch'ing. Spring 1995. MR. SMITH.

An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644–1911). Discussion of societal relations, state organization, and ideology. Culminates in a day-long simulation of elite society in the eighteenth century. (Same as **Asian Studies 274.**)

275c,d. Modern China. Fall 1994. MR. SMITH.

An introduction to the history of China from 1840 to the present. Studies the confrontation with Western imperialism, the fall of empire, the Republican period, and the People's Republic. (Same as **Asian Studies 275.**)

278c,d. The Foundations of Tokugawa Japan. Spring 1996. MR. SMITH.

Addresses problems in the creation and early development of the Tokugawa (1600–1868) state and society, including the transformation of the samurai from professional warriors into professional bureaucrats and the unanticipated growth of a quasi-autonomous urban culture. (Same as **Asian Studies 278.**)

Problems Courses

Courses **300** through **373** involve the close investigation of certain aspects of the areas and periods represented. Following a reading in and a critical discussion of representative primary and secondary sources, students develop specialized aspects as research projects, culminating in oral presentations and written essays. Adequate background is assumed, the extent of it depending on whether these courses build upon introductory courses found elsewhere in the history curriculum. Enrollment in these courses requires the consent of the instructor and is limited to 16 students. Majors in fields other than history are encouraged to consider these seminars.

Problems in Early European History

300c. The Social History of the Reformation. Fall 1995. MR. NYHUS.

A research seminar on the social structures of Germany, France, and Switzerland in the early sixteenth century, together with a study of the program of the reformers and the reasons for the popular reception of that program.

Problems in Modern European History

[**310c. The French Revolution, 1789–1795.**]

[**311c. Nazi Germany.**]

312c. Europe at War, 1914–1918. Fall 1993. MR. SCHECK.

A comparative examination of social and political change in the warring nations, focusing on the work force, the experience of total war, women's

suffrage, and war aims. Also addresses long-term effects of the war, particularly in culture and politics.

Problems in British History

[321c. **The Victorian Age.**]

322c. Race, Gender, and Ethnicity in British Society. Spring 1995.

MS. TANANBAUM.

An analysis of multiculturalism in Britain. Explores the impact of immigration on English society, notions of cultural pluralism, and the changing definitions and implications of gender in England from the late eighteenth century to the present. Students undertake research projects utilizing primary sources.

323c. Order and Disorder in Early Modern England. Spring 1994.

MR. HALLIDAY.

English society from the sixteenth to the eighteenth centuries was characterized by hierarchy and strict social controls. Or was it? Did pressure from the bottom of society drive social change as much as pressure from above? How did various notions of order and disorder overlap or compete? Topics include crime and local order, religious and political conflict, family and gender relations, and the social impact of economic and demographic change. Research is conducted in the library's holdings of early newspapers, books, and pamphlets, as well as in other sources.

Problems in American History

331c. A History of Women's Voices in America. Fall 1993. MS. MCMAHON.

An examination of women's voices in American history: private letters, journals, and autobiographies; short stories and novels; advice literature; essays and addresses. Research topics focus on the content and form of the writings as they illuminate women's responses to their historical situation.

Prerequisite: **History 246** or **248**, or permission of the instructor.

332c. Community in America, 1600–1900. Spring 1995. MS. MCMAHON.

Explores the ideals of community in American history, focusing on change, continuity, and diversity in the social, economic, and cultural realities of community experience. Examines the formation of new communities on a "frontier" that moved westward from the Atlantic to the Pacific; the changing face of community that accompanied modernization, urbanization, and suburbanization; and the attempts to create alternative communities either separate from or contained within established communities.

333c. Research in Twentieth-Century African-American History.

Fall 1993. MR. LEVINE.

Bowdoin has extensive source collections on this subject: papers of the Congress of Racial Equality and of the Student Non-Violent Coordinating Committee; White House Central Files of Civil Rights during the Kennedy

and Johnson administrations; FBI surveillance records; and much more. Students' research centers on this material. (Same as **Africana Studies 333**.)

Prerequisite: Any course in twentieth-century U.S. history. Preference given to students with previous background in African-American history.

334c. The Thirties. Fall 1994. MR. LEVINE.

Examines the Depression, the New Deal, American Communism, the formative years of the "New York Intellectuals," and the transformations in the American labor movement. A major research paper is required.

[**335c,d. The African-American Critique of America.**]

(Same as **Africana Studies 335**.)

Problems in Latin American History

350c,d. Economic Theory and the Problem of Underdevelopment in Latin America. Fall 1993. MR. WELLS.

The first part of this seminar examines economic theories that historically have been advanced to explain the process of development (and underdevelopment) in Latin America. In the latter portion of the course, students test these theories by applying them to a specific economic problem currently facing Latin America.

Prerequisite: **History 252** and/or **History 255**.

351c,d. The Mexican Revolution. Spring 1994. MR. WELLS.

An examination of the Mexican Revolution (1910–1920) and its impact on modern Mexican society. Topics include the role of state formation since the revolution; agrarian reform; U.S.-Mexican relations; the debt crisis; and immigration and other "border" issues.

Prerequisite: **History 252** and/or **History 255**.

352c,d. Land and Labor in Latin America. Spring 1995. MR. WELLS.

Examines some of the most significant conceptual problems related to Latin American agrarian history. Topics include pre-Columbian land and labor patterns; haciendas and plantations; slavery, debt peonage, and other forms of coerced labor; and the role of family elite networks throughout Latin America.

Prerequisite: **History 252** and/or **History 255**.

Problems in African History

360c,d. Problems of Development in Africa. Fall 1993. MR. SELASSIE.

Changing ideas of nationalism and economic and political structures in contemporary Africa. (Same as **Government 360**.)

361c,d. Islam in Africa. Spring 1995. MR. MANCHUELLE.

Islam is the most important religion in sub-Saharan Africa today. Research and discussion topics include Islamic communities in medieval Africa, quietist and militant Islam, nineteenth-century Islamic reform movements and revolutions, Islamic sects during the colonial period, and Islam in Africa

today. We focus especially on West and East Africa, but Islamic minorities in Central and South Africa are also considered.

Problems in Asian History

370c,d. Problems in Chinese History. Every fall. MR. SMITH.

Reviews the whole of Chinese history. Students develop their research skills and write a substantial research paper. (Same as **Asian Studies 370.**)

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study. THE DEPARTMENT.

451c, 452c. Honors Seminar. Every year. THE DEPARTMENT.

Interdisciplinary Majors

A student may, with the approval of the departments concerned and the Recording Committee, design an interdisciplinary major to meet an individual, cultural, or professional objective.

Bowdoin has seven interdisciplinary major programs that do not require the approval of the Recording Committee because the departments concerned have formalized their requirements. These programs are in art history and archaeology, art history and religion, chemical physics, computer science and mathematics, geology and chemistry, geology and physics, and mathematics and economics. A student wishing to pursue one of these majors needs the approval of the departments concerned.

Art History and Archaeology

Requirements

1. **Art 101, 212, 222**, and one of **Art 302** through **388**; **Archaeology 101, 102**, and any three additional archaeology courses, at least one of which must be at the 300 level.

2. Any two art history courses numbered **10** through **388**.

3. One of the following: **Classics 51** or **290** (Independent Study in Ancient History); **History 201**; **Philosophy 111**; or an appropriate course in religion at the 200 level.

4. Either **Art 400** or **Classics 400** (Independent Study in Archaeology).

Art History and Religion

Requirements

1. **Art History 101, 110**; **Religion 101, 102**, and **103**. It is strongly recommended that **Art History 101** and **Religion 101** be taken before the end of the sophomore year. **Art History 110** and **Religion 102** and **103** should also be taken as early as possible. No other introductory course (10–199) in either department will count toward the major.

2. Three additional courses at the intermediate or advanced level must be taken in each department. At least one, but not more than two, must be an independent study with an interdisciplinary emphasis.

3. Also required are four appropriately distributed courses outside the art history and religion departments. Recommended are courses in studio art, philosophy of art, history, literature, or a science.

Within this framework, the student will design his or her own major in consultation with an advisor from each department.

Chemical Physics

Requirements

1. **Chemistry 109, 251; Mathematics 161, 171, and 181 or 223; Physics 103, 227, 300.**

2. Either **Chemistry 252** or **Physics 310**.

3. Three courses from **Chemistry 252, 254, 332, 335, 340, 350, 401, 402; Physics 223, 228, 229, 310, 320, 350, 451, 452**. At least two of these must be below the 400 level.

Computer Science and Mathematics

Requirements

1. Six courses in computer science as follows: **Computer Science 101, 102, 220, and 231**, and two electives numbered 250 or above.

2. **Mathematics 289**, which is cross-listed as **Computer Science 289**.

3. Six courses in mathematics as follows: **Mathematics 181, 222, 225, and 228**, and two electives from among **Mathematics 244, 249, 262, and 288**.

Geology and Chemistry

Requirements

1. **Chemistry 109** and four courses from the following: **Chemistry 210, 225, 226, 240, 251**, and approved advanced courses.

2. **Geology 101, 102, and 201**.

3. Three courses from the following: **Geology 211, 221, 222, 241, 250, 256, 262, 265, and 278**.

4. **Physics 103** and **Mathematics 161** and **171**.

There are many different accents a student can give to this major, depending on his or her interests. For this reason, the student should consult with the geology and chemistry departments in selecting electives.

Geology and Physics

Requirements

1. **Chemistry 109; Geology 101, 102, 241, 262; Mathematics 161, 171; Physics 103, 223, 227.**

2. Either **Physics 255** or **300**.
3. Two additional courses in geology and/or physics.

Mathematics and Economics

Requirements

1. Seven courses in mathematics as follows: **Mathematics 181, 222, 225, 249, 265**; either **Computer Science 101** or **Mathematics 205** or **244**; and one of **Mathematics 223, 224, 263, or 269**.
2. Four courses in economics as follows: **Economics 255, 256, and 316**, and one other 300-level course.

Latin American Studies

Coordinated by the Committee on Latin American Studies

John Turner, *Committee Chair*

Latin American studies is an integrated interdisciplinary program that explores the cultural heritage of Mesoamerica, the Caribbean, and the South American continent. This multidisciplinary approach is complemented by a concentration in a specific discipline. Competence in Spanish (or another appropriate language with the approval of the administering committee) is required, and it is recommended that students participate in a study-away program in Latin America. Upon their return, students who study away should consider an independent study course to take advantage of their recent educational experience.

Requirements for the Minor in Latin American Studies

The minor consists of at least one course at Bowdoin beyond the intermediate level in Spanish, **History 255** (Modern Latin American History), and three additional courses, two of which must be outside the student's major department. Independent studies can meet requirements for the minor only with the approval by the Latin American Studies Committee of a written prospectus of the independent study.

The Latin American studies courses below may also be used to formulate a student-designed major.

CROSS LISTINGS

(For full course descriptions and prerequisites, see the appropriate department listings.)

Government and Legal Studies

102b. Caribbean Forms. Fall 1993. MR. POTHOLM.

History

17c,d. The Cuban Revolution. Fall 1994. MR. WELLS.

- 250c,d. **The History of Mexico.** Fall 1995. MR. WELLS.
 252c,d. **Colonial Latin America.** Fall 1993. MR. WELLS.
 255c,d. **Modern Latin America.** Spring 1994. MR. WELLS.
 256c,d. **Comparative Slavery.** Fall 1994. MR. WELLS.
 258c,d. **Latin American Revolutions.** Spring 1995. MR. WELLS.
 350c,d. **Economic Theory and the Problem of Underdevelopment in Latin America.** Fall 1993. MR. WELLS.
 351c,d. **The Mexican Revolution.** Spring 1994. MR. WELLS.
 352c,d. **Land and Labor in Latin America.** Spring 1995. MR. WELLS.

Spanish

- 205c. **Advanced Spoken and Written Spanish.** Every fall. MR. TURNER.
 313c,d. **Indigenous and Hispanic Literature of Colonial Latin America.** Fall 1994.
 Prerequisite: **Spanish 209** or permission of the instructor.
 314c,d. **Modern Spanish-American Literature.** Spring 1995. MR. TURNER.
 Prerequisite: **Spanish 209** or permission of the instructor.
 321c,d. **Latin American Civilization.** Spring 1994.
 322c,d. **Women Writers of Latin America.** Fall 1993.
 325c,d. **The Island and Identity in Hispanic Caribbean Literature.** Spring 1994. MS. MANN.

Mathematics

Professors

William H. Barker
 Stephen T. Fisk
 Charles A. Grobe, Jr.
 R. Wells Johnson
 James E. Ward, *Chair*

Associate Professor

Rosemary A. Roberts

Assistant Professors

Robert J. Knapp
 Sharon L. Pedersen
 Norean Radke Sharpe

Requirements for the Major in Mathematics

A major consists of at least eight courses numbered 200 or above, including at least one of the following—**Mathematics 262, 263, 286**, or a course numbered in the 300s.

A student must submit a planned program of courses to the department when he or she declares a major. That program should include both theoretical and applied mathematics courses, and it may be changed later with the approval of the departmental advisor.

All majors should take basic courses in algebra (e.g., **Mathematics 222** or **262**) and in analysis (e.g., **Mathematics 223** or **263**), and they are strongly

encouraged to complete at least one sequence in a specific area of mathematics. Those areas are algebra (**Mathematics 222, 262, and 302**); analysis (**Mathematics 243, 263, and 303**); applied mathematics (**Mathematics 224, 264, and 304**); probability and statistics (**Mathematics 225, 265, and 305**); and geometry/topology (**Mathematics 247, 286, and 287**). In exceptional circumstances, a student may substitute a quantitative course from another department for one of the eight mathematics courses required for the major, but such a substitution must be approved in advance by the department. Without specific departmental approval, no course which counts toward another department's major or minor may be counted toward a mathematics major or minor.

Majors who have demonstrated that they are capable of intensive advanced work are encouraged to undertake independent study projects. With the prior approval of the department, such a project counts toward the major requirement and may lead to graduation with honors in mathematics.

Requirements for the Minor in Mathematics

A minor in mathematics consists of a minimum of four courses numbered 200 or above, at least one of which must be **Mathematics 243, 247**, or any mathematics course numbered 262 or above. For students who major in computer science and who therefore take **Mathematics 228, 231, and 289**, the minor consists of a minimum of three additional courses numbered 200 or above, at least one of which must be **Mathematics 243, 247**, or any mathematics course numbered 262 or above.

Interdisciplinary Majors

The department participates in interdisciplinary programs in mathematics and economics and in computer science and mathematics. See pages 127–28.

Listed below are some of the courses recommended to students with the indicated interests.

For secondary school teaching: **Computer Science 101, Mathematics 222, 225, 242, 247, 262, 263, 288.**

For graduate study: **Mathematics 222, 223, 243, 262, 263, 286**, and at least one course numbered in the 300s.

For engineering and applied mathematics: **Mathematics 223, 224, 225, 243, 244, 264, 265, 288, 304.**

For mathematical economics and econometrics: **Mathematics 222, 223 or 263, 225, 244, 249, 265, 269, 288, 305**, and **Economics 316.**

For computer science: **Computer Science 220, 231; Mathematics 222, 225, 228, 244, 249, 262, 265, 288, 289.**

For operations research and management science: **Mathematics 222, 225, 249, 265, 269, 288, 305**, and **Economics 316.**

50a. Topics in Mathematics. Every other spring. Spring 1995.

THE DEPARTMENT.

Designed for students who wish to learn something about the spirit of modern mathematics and who do not plan to take other mathematics courses. Emphasis on the history and origins of mathematical problems; the development of the ideas, language, and symbolism needed to deal with those problems; and the ramifications and applications of the theory to current quantitative problems in a variety of disciplines. Topics are chosen from geometry, number theory, probability, game theory and optimization, graph theory, topology, and computing.

60a. Introduction to College Mathematics. Every spring.

THE DEPARTMENT.

Material selected from the following topics: combinatorics, probability, modern algebra, logic, linear programming, and computer programming. This course, followed by **Mathematics 75** or **161**, is intended as a one-year introduction to mathematics and is recommended for those students who intend to take only one year of college mathematics.

75a. Introduction to Statistics and Data Analysis. Every other spring. Spring 1994. MRS. ROBERTS.

Students learn to draw conclusions from data using exploratory data analysis and statistical techniques. Examples are drawn primarily from the life sciences. The course includes topics from exploratory data analysis, the planning and design of experiments, the analysis of normal measurements, and nonparametric inference. The computer is used extensively.

Open to students whose secondary school background has included at least three years of mathematics. Not open to students who have taken a college-level statistics course (such as **Psychology 250** or **Economics 257**).

161a. Differential Calculus. Every semester. THE DEPARTMENT.

Functions, including the trigonometric, exponential, and logarithmic functions; the derivative and the rules for differentiation; the anti-derivative; applications of the derivative; and applications of the anti-derivative. Three hours of class meetings per week, plus a minimum of two hours of laboratory work every other week. Open to students whose secondary school background has included at least three years of mathematics.

171a. Integral Calculus. Every semester. THE DEPARTMENT.

The definite integral; the Fundamental theorems; improper integrals; applications of the definite integral; differential equations; and approximations including Taylor polynomials and Fourier series. Three hours of class meetings per week, plus a minimum of two hours of laboratory work every other week.

Prerequisite: **Mathematics 161** or equivalent.

[172a. Integral Calculus, Advanced Section.]

181a. Multivariate Calculus. Every semester. THE DEPARTMENT.

Multivariate calculus in two and three dimensions. Vectors and curves in two and three dimensions; partial and directional derivatives; the gradient; the Chain Rule in higher dimensions; double and triple integration; polar, cylindrical, and spherical coordinates; line integration; conservative vector fields; and Green's theorem. Three hours of class meetings per week, plus a minimum of two hours of laboratory work every other week.

Prerequisite: **Mathematics 171** or equivalent.

205a. Applied Multivariate Statistics. Every other fall. Fall 1993.

MR. FISK.

An introduction to the techniques of applied multivariate analysis based on matrix algebra and the multivariate normal distribution. Topics to be discussed include discriminant analysis, principal components, factor analysis, canonical correlation, multidimensional scaling, classification, and graphical techniques. Students learn how to run and interpret the output from the statistical package Splus.

Prerequisites: **Mathematics 181** and a college-level statistics course.

222a. Linear Algebra. Every spring. Spring 1994. THE DEPARTMENT.

Topics include vectors, matrices, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors, and quadratic forms. Applications to linear equations, conics, quadric surfaces, least-squares approximation, and Fourier series.

Prerequisite: **Mathematics 181** or permission of the instructor.

223a. Vector Calculus. Every fall. Fall 1993. MR. JOHNSON.

The basic concepts of multivariate and vector calculus. Topics include continuity; the derivative as best affine approximation; the chain rule; Taylor's theorem and applications to optimization; Lagrange multipliers; linear transformations and Jacobians; multiple integration and change of variables; line and surface integration; gradient, divergence, and curl; conservative vector fields; and integral theorems of Green, Gauss, and Stokes. Applications from economics and the physical sciences are discussed as time permits.

Prerequisite: **Mathematics 181**.

224a. Applied Mathematics I. Every other fall. Fall 1993. MR. KNAPP.

An introduction to the theory of ordinary differential equations with diverse applications to problems arising in the natural and social sciences. Emphasis on the rigorous development of the different methods of solution. Topics include first-, second- and higher-order equations with applications in qualitative stability and oscillation theory, Laplace transforms, series solutions, and the existence and uniqueness theorems. A few numerical methods are introduced sporadically during the course. Knowledge of BASIC, FORTRAN, or Pascal is helpful.

Prerequisite: **Mathematics 181** or concurrent registration in **181**.

225a. Probability. Every fall. MRS. ROBERTS.

A study of the mathematical models used to formalize nondeterministic or “chance” phenomena. General topics include combinatorial models, probability spaces, conditional probability, discrete and continuous random variables, independence and expected values. Specific probability densities, such as the binomial, Poisson, exponential, and normal, are discussed in depth.

Prerequisite: **Mathematics 181**.

228a. Discrete Mathematical Structures. Every spring. THE DEPARTMENT.

An introduction to logic, reasoning, and the discrete mathematical structures that are important in computer science. Topics include propositional logic, types of proof, induction and recursion, sets, counting, functions, relations, and graphs.

Prerequisite: **Mathematics 161** or permission of the instructor.

231a. Algorithms. Every year. Fall 1993. MR. TUCKER.

The study of algorithms concerns programming for computational expediency. The course covers practical algorithms as well as theoretical issues in the design and analysis of algorithms. Topics include trees, graphs, sorting, dynamic programming, NP-completeness, and parallel algorithms. (Same as **Computer Science 231**.)

Prerequisites: **Computer Science 102** and **Mathematics 228**, or permission of the instructor.

242a. Number Theory. Every other fall. Fall 1994. MR. JOHNSON.

A standard course in elementary number theory which traces the historical development and includes the major contributions of Euclid, Fermat, Euler, Gauss, and Dirichlet. Prime numbers, factorization, and number-theoretic functions. Perfect numbers and Mersenne primes. Fermat’s theorem and its consequences. Congruences and the law of quadratic reciprocity. The problem of unique factorization in various number systems. Integer solutions to algebraic equations. Primes in arithmetic progressions. An effort is made to collect along the way a list of unsolved problems.

243a. Functions of a Complex Variable. Every other fall. Fall 1993.

MR. GROBE.

The differential and integral calculus of functions of a complex variable. Cauchy’s theorem and Cauchy’s integral formula, power series, singularities, Taylor’s theorem, Laurent’s theorem, the residue calculus, harmonic functions, and conformal mapping.

Prerequisite: **Mathematics 171**.

244a. Numerical Analysis. Spring 1996.

An introduction to the numerical solutions of mathematical problems. Topics include methods for solving linear systems, approximation theory, numerical differentiation and integration, and numerical methods for

differential equations. Whenever possible, numerical techniques are used to solve mathematical problems generated by applied physical examples. Students are required to develop computer programs for the topics covered; additional instructional time may be scheduled for computer laboratory demonstrations.

Prerequisites: **Mathematics 181** or **222**.

247a. Geometry. Every other fall. Fall 1993. Ms. PEDERSEN.

A survey of classical Euclidean and non-Euclidean geometry. Neutral geometry: the common ground of both Euclidean and non-Euclidean geometry. Parallel postulates. Hyperbolic and elliptic geometry.

Prerequisite: **Mathematics 181** or permission of the instructor.

249a. Linear Programming and Optimization. Every other fall. Fall 1994.

A survey of some of the mathematical techniques for optimizing various quantities, many of which arise naturally in economics and, more generally, in competitive situations. Production problems, resource allocation problems, transportation problems, and the theory of network flows. Game theory and strategies for matrix games. Emphasis on convex and linear programming methods, but other nonlinear optimization techniques are presented. Includes computer demonstrations of many of the techniques that are discussed.

Prerequisite: **Mathematics 181**.

262a. Introduction to Algebraic Structures. Every year in alternate semesters. Fall 1993. MR. WARD.

A study of the basic arithmetic and algebraic structure of the common number systems, polynomials, and matrices. Axioms for groups, rings, and fields, and an investigation into general abstract systems that satisfy certain arithmetic axioms. Properties of mappings that preserve algebraic structure.

Prerequisite: **Mathematics 222**, or **Mathematics 181** and permission of the instructor.

263a. Introduction to Analysis. Every year in alternate semesters. Spring 1994.

Emphasizes proof and develops the rudiments of mathematical analysis. Topics include an introduction to the theory of sets and topology of metric spaces, sequences and series, continuity, differentiability, and the theory of Riemann integration. Additional topics may be chosen as time permits.

Prerequisite: **Mathematics 171**.

264a. Applied Mathematics II. Every other spring. Spring 1994.

MR. KNAPP.

A continuation of **Mathematics 224** and an introduction to dynamical systems. Topics include series solutions and special functions, the applications of linear algebra and vector analysis to the solutions of systems of first-order linear differential equations, stability of linear systems, Green's functions and inhomogeneous equations, and nonlinear equations, with empha-

sis on stability of equilibria, perturbation theory, chaos theory, and a few numerical methods. Knowledge of a programming language is helpful.

Prerequisite: **Mathematics 224**.

265a. Statistics. Every spring. MRS. ROBERTS.

An introduction to the fundamentals of mathematical statistics. General topics include likelihood methods, point and interval estimation, and tests of significance. Applications include inference about binomial, Poisson, and exponential models, frequency data, and analysis of normal measurements.

Prerequisites: **Mathematics 225**.

269a. Seminar in Operations Research and Mathematical Models.

Every other spring. Spring 1995.

Selected topics in operations research and some of the mathematical models used in economics. Emphasis is on probabilistic models and stochastic processes, with applications to decision analysis, inventory theory, forecasting, and queueing theory.

Prerequisites: **Mathematics 225** and **249**, or permission of the instructor.

[**286a. Topology.**]

287a. Advanced Topics in Geometry. Every other spring. Spring 1994.

Ms. PEDERSEN.

One or more selected topics from classical geometry, projective geometry, algebraic geometry, or differential geometry.

Prerequisite: **Mathematics 247**.

288a. Combinatorics and Graph Theory. Every other spring.

Spring 1995.

An introduction to combinatorics and graph theory. Topics to be covered may include enumeration, matching theory, generating functions, partially ordered sets, Latin squares, designs, and graph algorithms.

Prerequisite: **Mathematics 228** or **262** or **263** or permission of the instructor.

289a. Theory of Computation. Every year. Spring 1994. MR. FISK.

The theoretical principles that underlie formal languages, automata, computability, and computational complexity. Topics include regular and context-free languages, finite and pushdown automata, Turing machines, Church's thesis, Gödel numbering, and unsolvability. (Same as **Computer Science 289**.)

Prerequisite: **Mathematics 228** or permission of the instructor.

302a. Advanced Topics in Algebra. Every other spring. Spring 1994.

One or more specialized topics from abstract algebra and its applications. Topics may include group representation theory, coding theory, symmetries, ring theory, finite fields and field theory, algebraic numbers, and Diophantine equations.

Prerequisite: **Mathematics 262**.

303a. Advanced Topics in Analysis. Every other spring. Spring 1995.

One or more selected topics from analysis. Topics may be chosen from Lebesgue integration, general measure and integration theory, Fourier analysis, Hilbert and Banach space theory, and spectral theory.

Prerequisite: **Mathematics 263.**

304a. Advanced Topics in Applied Mathematics. Fall 1994.

One or more selected topics in applied mathematics. Material selected from the following: Fourier series, partial differential equations, integral equations, calculus of variations, bifurcation theory, asymptotic analysis, applied functional analysis, and topics in mathematical physics.

Prerequisite: **Mathematics 264.**

305a. Advanced Topics in Probability and Statistics. Every other fall. Fall 1994. MRS. ROBERTS.

One or more specialized topics in probability and statistics. Possible topics include regression analysis, nonparametric statistics, logistic regression, and other linear and nonlinear approaches to modeling data. Emphasis is on the mathematical derivation of the statistical procedures and on the application of the statistical theory to real-life problems.

Prerequisites: **Mathematics 222** and **265** or permission of the instructor.

290a. Intermediate Independent Study. THE DEPARTMENT.**400a. Advanced Independent Study and Honors.** THE DEPARTMENT.

Music

Professor

Elliott S. Schwartz†

Associate Professors

Robert K. Greenlee

James W. McCalla,

Chair

Assistant Professor

Jane C. Girdham

Visiting Assistant Professor

Ellen C. Leichtman

Director of Bowdoin Chorus

Anthony F. Antolini

Director of Concert Band

John Morneau

Requirements for the Major in Music

The major in music consists of **Music 101** or exemption, **102, 201, 202, 203; Music 301, 302**; one topics course (either **Music 351** or **361**); one year of ensemble performance studies; and one elective course in music.

Requirements for the Minor in Music

The minor in music consists of **Music 101, 102, 103**, one music elective at the 200 or 300 level, one year of ensemble performance studies, and one other elective in music.

All majors and minors are expected to complete at least one year of individual performance studies.

10c. Juliets, Romeos, and Sally Bowles: Love in Society. Spring 1994.
MR. MCCALLA.

(For a full description of first-year seminars, see pages 94–100.)

99c,d. World Music I. Fall 1993. Ms. LEICHTMAN.

A study of the ethnic, folk, or traditional music traditions of Europe, sub-Saharan Africa, and the Americas. Music is approached, where applicable, through (1) historical, cultural, and social context; (2) musical instruments; (3) theoretical music systems, Western and otherwise; and (4) major representative musical and theatrical genres. See also **Music 100**, World Music II (spring semester).

100c,d. World Music II. Spring 1994. Ms. LEICHTMAN.

The art music traditions of the Middle East, Iran, India, Indonesia, China, and Japan. Music is approached, where applicable, through (1) historical, cultural, and social context; (2) musical instruments; (3) theoretical music systems, Western and otherwise; and (4) major representative musical and theatrical genres. No prerequisite.

101c. Theory I: Fundamentals of Music Theory. Every year. Fall 1993.
Ms. GIRDHAM.

A course in the basic elements of Western music and their notation, through the essentials of diatonic harmony. The class concentrates equally on written theory and musicianship skills to develop musical literacy. Frequent written assignments, drills, and quizzes. Students with musical backgrounds who wish to pass out of Theory I must take the placement test at the beginning of the fall semester.

102c. Theory II: Diatonic and Chromatic Harmony I. Every year.
Spring 1994. Ms. GIRDHAM.

Study of diatonic and chromatic harmony and of simple tonal forms, emphasizing analysis and part-writing of music from the late eighteenth and early nineteenth centuries. Three class hours plus one hour weekly in the musicianship skills laboratory.

Prerequisite: **Music 101** or equivalent.

103c. Introduction to Western Music. Every year. Fall 1993.
THE DEPARTMENT.

For students with little or no previous training in music. Ability to read music or play an instrument is not necessary. The essentials of music—ways of organizing sound and time—are studied as they have been used in different periods and in the context of musical forms. Listening materials are drawn from a variety of sources: early Western music, Western music from the baroque through Romantic eras, and twentieth-century music.

Music 131 through 139 are topics courses in specific aspects of music history and literature, designed for students with little or no background in music. Course titles and contents may change every semester.

137c. The Music of Bach and Handel. Spring 1994. Ms. GIRDHAM.

A comparative study of music by Bach and Handel, their backgrounds, and their influence. We examine their contrasting professional and cultural environments: Bach's as a church musician in Lutheran Germany, Handel's as a royal favorite in Georgian England. We also study their influence on later composers through revivals of their music in the nineteenth century.

138c,d. Latin American Music. Spring 1994. Ms. LEICHTMAN.

An introduction to the folk and traditional music of Latin America, from the Caribbean through South America, including music from Mexico, Haiti, Bolivia, Brazil, and Argentina. The course is divided into three parts: (1) Indian heritage; (2) African heritage; and (3) Mestizo heritage. Music is studied through its historical, cultural, and social contexts. Musical instruments and music theory are also a focus. No prerequisites.

201c. Theory III: Chromatic Harmony. Every year. Fall 1993.

MR. MCCALLA.

Study of chromatic harmony and formal analysis of works from nineteenth-century music.

Prerequisite: **Music 102**.

202c. Theory IV: Twentieth-Century Harmony. Every year.

Spring 1994. Mr. MCCALLA.

Study of the various harmonic systems of twentieth-century music, from post-tonal works (Debussy, Ravel, Stravinsky) through atonality (Ives, Schoenberg) to serialism (Schoenberg, Berg, and Webern), neoclassicism (Bartók), neoromanticism, and contemporary "minimalism."

Prerequisite: **Music 201**.

Music 301 and **302** are intended primarily for music majors and minors. **Music 102** is prerequisite or corequisite.

301c. Music History: Antiquity to 1750. Fall 1994.**302c. Music History: 1750 to the Present.** Spring 1995.**351c. Music of the 1790s.** Fall 1993. Ms. GIRDHAM.

A study of music and musicians in Europe and America in the 1790s. Includes investigation of the different cultural activities of various European and American cities in the 1790s, in particular London, Paris, Philadelphia, and Vienna. We discuss works of lesser known composers as well as the great Classical composers, Haydn, Mozart, and Beethoven, plus performers and musical organizations. Resources include eighteenth-century musical editions, along with contemporary diaries, histories, and newspapers.

Prerequisite: **Music 102**.

361c,d. Topics in Ethnomusicology: Genres and Critical Theory.

Spring 1994. Ms. LEICHTMAN.

Focus on two or three musical genres within Latin America. These forms are approached historically, culturally, and musically through major theoretical apparatus, including structuralism, hermeneutics, and postmodern rhetoric.

Prerequisite: One course in ethnomusicology or anthropology.

PERFORMANCE STUDIES

Up to six credits of individual performance and ensemble courses together may be taken for graduation credit. Applied Performance Studies bear differing course numbers, depending on the semester of study.

235c–242c. Individual Performance Studies. Every year.

The following provisions govern applied music for credit:

1. Individual performance courses are intended for the continued study of an instrument with which the student is already familiar. Students must take at least two consecutive semesters of study on the same instrument to receive any credit.

2. Admission is by audition only. Only students who are intermediate or beyond in the development of their skills are admitted. Students may enroll only with the consent of the department.

3. Beginning with the second semester of lessons, students are expected to play in a Repertory Class midway through the semester, and must participate in Juries at the end of each semester.

4. To receive credit for Individual Performance Studies, the student must complete two other music credits *within the first two and a half years of study or by graduation, whichever comes first*. The student may choose these credits from any two of the following courses: **Music 101, 102, 103, 131–139**, Orchestra (**Music 261**), Band (**Music 221**), Chamber Choir (**Music 271**), or Chorus (**Music 251**). *At least one of these courses must be started by the second semester of the first year of study. At least one course must not be an ensemble.*

5. One-half credit is granted for each semester of study.

6. The student pays a fee of \$210 for each semester of study; this fee is waived for music majors and minors. In some cases, the student may have to travel off campus to receive instruction. Instruction is offered as available on orchestral and chamber instruments for which a significant body of written literature exists.

Instructors include Julia Adams (viola), Betty Rines (trumpet), Naydene Bowder (piano and harpsichord), Neil Boyer (oboe), Judith Cornell (voice), Ray Cornils (organ), Kathleen Foster (cello), John Johnstone (guitar), Stephen Kecskemethy (violin), David Libby (jazz piano), Mark Manduca (trombone and tuba), Deirdre Manning (flute), Shirley Mathews (piano), John Morneau (saxophone and clarinet), Martin Perry (piano), Karen Pierce (voice), and George Rubino (bass).

Ensemble Performance Studies. Every year.

221c–228c. Concert Band. MR. MORNEAU.

251c–258c. Chorus. MR. ANTOLINI.

261c–268c. Orchestra. MR. GREENLEE.

271c–278c. Chamber Choir. MR. GREENLEE.

281c–288c. Chamber Ensembles. THE DEPARTMENT.

The following provisions govern ensemble:

1. Students are admitted to an ensemble only with the consent of the instructor and, for those enrolled in chamber ensembles, upon the formation of a specific chamber group.

2. One-half credit is granted for each semester of study, and each student in the ensemble must be signed up for credit in the registrar's office.

3. Grade is Credit/Fail.

4. Ensembles meet regularly for a minimum of three hours weekly. Chamber ensembles are offered only as instruction is available.

5. All ensembles require public performance.

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Neuroscience

Administered by the Committee on Neuroscience

*Guenter H. Rose**, Committee Chair*

Requirements for the Major in Neuroscience

I. Core Courses

A. Biology:

Biology 104a, Introductory Biology.

Biology 203a, Comparative Neurobiology.

Biology 305a, Neuroethology, *or*

Biology 114a, Comparative Physiology.

B. Psychobiology:

Psychobiology 265a, Psychobiology.

Psychobiology 245a, Human Neuropsychology, *or*

Psychobiology 300a, Psychopharmacology, *or*

Psychobiology 315a, Sensory/Motor Transformation.

C. Psychology:

Psychology 101b, Introduction to Psychology.

Psychology 270b, Cognition, *or*

Psychobiology 230a, Sensation and Perception, *or*

Psychobiology 310a, Cognitive Neuroscience.

D. Chemistry:

Chemistry 225a, Elementary Organic Chemistry.

E. Statistics/Mathematics:

Mathematics 75a, An Introduction to Statistics and Data Analysis, or

Psychology 250b, Statistical Analysis.

II. Additional Courses Required

In addition to the nine core courses, two courses are required from the lists below, at least one of which must be in biology.

A. Biology:

112a, Genetics and Molecular Biology.

114a, Comparative Physiology.

117a, Developmental Biology.

261a, Biochemistry I.

304a, Topics in Biochemistry and Molecular Biology (with approval).

305a, Neuroethology.

B. Psychobiology:

230a, Sensation and Perception.

245a, Human Neuropsychology.

255a, Visual Neuroscience.

300a, Psychopharmacology.

310a, Cognitive Neuroscience.

315a, Sensory/Motor Transformation.

330a, Advanced Seminar: Current Trends and Controversies in Psychobiology.

C. Psychology

210b, Infant and Child Development.

260b, Abnormal Personality.

270b, Cognition.

271b, Language: A Developmental Perspective.

310b, Clinical Psychology.

361b, Cognitive Development.

[362b, Infancy.]

III. Recommended Courses

Philosophy 225c, The Nature of Scientific Thought.

Physics 103a, Mechanics and Matter.

Sociology 251b, Sociology of Health and Illness.

Philosophy

Professor

Denis J. Corish, *Chair*

Associate Professor

Lawrence H. Simon

Instructor

Matthew Stuart

Visiting Instructor

Scott R. Sehon

Requirements for the Major in Philosophy

The major consists of eight courses, which must include **Philosophy 111** and **112**; at least two other courses from the group numbered in the 200s; and two from the group numbered in the 300s. The remaining two courses may be from any level.

Requirements for the Minor in Philosophy

The minor consists of four courses, which must include **Philosophy 111** and **112** and one course from the group numbered in the 200s. The fourth course may be from any level.

First-Year Seminars

Enrollment is limited to 16 students for each seminar. First-year students are given first preference for the available places; sophomores are given second preference. If there are any remaining places, juniors and seniors may be admitted with permission of the instructor.

Topics change from time to time but are restricted in scope and make no pretense to being an introduction to the whole field of philosophy. They are topics in which contemporary debate is lively and as yet unsettled and to which contributions are often being made by more than one field of learning.

For a full description of first-year seminars, see pages 94–100.

11c. Free Will. Fall 1994. MR. CORISH.

12c. The Mind-Body Problem. Fall 1993. MR. SEHON.

14c. Skepticism. Fall 1993. Fall 1994. Fall 1995. MR. STUART.

[15c. Self and Self-Knowledge.]

[16c. Moral Problems.]

Introductory Courses

51c. Philosophy and Poetry. Spring 1995. MR. CORISH.

What is poetry? What is its relation to philosophy, to science? We discuss such questions, using as texts both poems themselves and writings about poetry. We pay special attention to Plato, the most poetic of philosophers, and ask why he seems to condemn poetry.

111c. Major Philosophers of the West: Beginnings to Christianity.

Fall 1993. Fall 1994. MR. CORISH.

The sources and prototypes of Western thought. Emphasis on Plato and Aristotle, with some attention given to the pre-Socratic philosophers who

influenced them and to the Stoics and Epicureans. Medieval philosophy is more briefly considered, to show the interaction of Christianity and Greek thought.

112c. Major Philosophers of the West: Renaissance to Idealism.

Spring 1994. Spring 1995. MR. STUART.

Some attention is given to the philosophic grounds of the scientific revolution and to the intellectual and moral response the new scientific view of the world evoked from the philosophers. Reading in the following: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

Intermediate Courses

With the exception of **Philosophy 200**, intermediate courses are open to all students without prerequisite.

200c. Major Philosophers of the West: The Nineteenth Century.

Fall 1994. MR. SIMON.

A study of tendencies in the nineteenth century that have had an important influence on contemporary thought: the situation of philosophy after Kant; the development of idealism through Fichte and Hegel; and reactions to Hegel by Marx, Kierkegaard, and Nietzsche. Time permitting, attention will be given to Schopenhauer, Mill, and the origins of positivism.

Prerequisite: **Philosophy 112** or permission of the instructor.

221c. Ethics. Spring 1994. Spring 1996. MR. SIMON.

How should one live? What is the good? What is my duty? The fundamental questions of ethics are examined in classic texts including works of Aristotle, Hume, Mill, Kant, and Nietzsche.

222c. Political Philosophy. Fall 1993. Fall 1995. MR. SIMON.

Examines some of the major issues and concepts in political philosophy, including political obligation and consent, freedom and coercion, justice, equality, democracy, and the nature of liberalism. Readings from classical texts (Hobbes, Locke, Hume, Rousseau, Mill) as well as contemporary sources.

223a. Logic and Formal Systems. Spring 1994. Spring 1996. MR. CORISH.

An introduction to the techniques and applications of twentieth-century deductive logic. After a consideration of the traditional approach, including the syllogism, the following topics are taken up: propositions, truth-functions, quantification theory, predicates, relations, natural deduction, and the properties of formal systems (consistency, completeness, etc.). No background in mathematics is presupposed.

225c. The Nature of Scientific Thought. Fall 1993. Fall 1995.

MR. CORISH.

A historical and methodological study of scientific thought as exemplified in the natural sciences. Against a historical background ranging from the

beginnings of early modern science to the twentieth century, such topics as scientific inquiry, hypothesis, confirmation, scientific laws, theory, and theoretical reduction are studied. The readings include such authors as Gale, Kuhn, and Hempel.

227c. Contemporary Metaphysics. Spring 1994. MR. STUART.

A survey of recent work in the analytic tradition on problems about the most general features of reality. Topics include natural kinds, freedom and responsibility, personal identity, the primary/secondary quality distinction, and mind and matter. Readings by Ayer, Kripke, Putnam, Nagel, Shoemaker, Boyd, Fodor, and others.

[229c. **Philosophy of Art.**]

[231c. **Existentialism.**]

236c. Environmental Analysis: Political Philosophy and Policy.

Spring 1994. Spring 1995. Spring 1996. MR. SIMON.

Examines aspects of the environmental crisis with special emphasis on political issues. Topics include our relation to and responsibility for nature in light of the present crisis; the adequacy of the conceptual and political resources of our tradition to address the crisis; and the interconnection of scientific, moral, political, and policy factors. (Same as **Environmental Studies 236.**)

237c. Language and Reality. Fall 1993. MR. SEHON.

Twentieth-century Anglo-American philosophy has been characterized by a concern with language: philosophers have looked to the nature of language and meaning in hopes of solving or dissolving traditional philosophical disputes. We examine the writings of a number of authors in this tradition, including Ayer, Carnap, Quine, Wittgenstein, Davidson, and Austin. Topics include meaning, reference, truth, and the relations between language and the world and between language and thought.

238c. Feminism and Liberalism. Spring 1994. MR. SEHON.

Recent feminist theory has challenged the assumptions underlying most contemporary approaches to moral and political theory. We begin with a review of contemporary political theory, concentrating on the writings of John Rawls and Ronald Dworkin. We then examine feminist critiques of contemporary liberalism, including the works of Carol Gilligan, Catharine Mackinnon, Jean Grimshaw, Susan Moller Okin, and others.

258c. Environmental Ethics. Fall 1993. Fall 1995. MR. SIMON.

The central issue in environmental ethics concerns what things in nature have moral standing and how conflicts of interest among them are to be resolved. After an introduction to ethical theory, topics to be covered include anthropocentrism, the moral status of nonhuman sentient things, preservation of endangered species and the wilderness, the moral status of nonsentient

living things, holism versus individualism, the land ethic, and deep ecology. (Same as **Environmental Studies 258**.)

Advanced Courses

Although courses numbered in the 300s are advanced seminars primarily intended for majors in philosophy, adequately prepared students from other fields are also welcome. Besides the stated prerequisite, at least one of the courses from the group numbered in the 200s will also be found a helpful preparation.

331c. Plato. Spring 1994. Spring 1996. MR. CORISH.

A study of some of the principal dialogues of Plato, drawn chiefly from his middle and later periods. The instructor selects the dialogues that will be read, but topics to be studied depend on the particular interests of the students.

Prerequisite: **Philosophy 111** or permission of the instructor.

[**332c. The Analytic Movement.**]

333c. Wittgenstein. Spring 1994. MR. SEHON.

Ludwig Wittgenstein has arguably been the most influential philosopher of the twentieth century. After some preliminary work in Frege and Russell, we examine Wittgenstein's *Tractatus Logico-Philosophicus* and to the first part of his *Philosophical Investigations*.

Prerequisite: **Philosophy 112** or permission of the instructor.

335c. The Philosophy of Aristotle. Spring 1995. MR. CORISH.

A textual study of the basics of Aristotle's philosophy. Aristotle's relationship to Plato, his criticism of the Platonic doctrine of Forms, and Aristotle's own doctrines of substance, causation, actuality, potentiality, form, and matter are discussed. Some of the Aristotelian disciplines of logic, physics, metaphysics, psychology, and moral philosophy are examined in terms of detailed specific doctrines, such as that of kinds of being, the highest being, the soul, and virtue.

Prerequisite: **Philosophy 111** or permission of the instructor.

[**336c. Spinoza's Ethics.**]

[**337c. Hume.**]

338c. Kant. Fall 1994. MR. STUART.

A detailed examination of *The Critique of Pure Reason*.

Prerequisite: **Philosophy 112** or permission of the instructor.

339c. Descartes. Fall 1993. MR. STUART.

Descartes's importance for the history of philosophy can hardly be overstated. Our study spans all of his major philosophical writings: the two early methodological treatises (the *Rules for the Direction of the Mind* and the *Discourse on Method*), the *Meditations* (including some of the *Objections and Replies*), and finally the attempt to derive physics from metaphysics in the *Principles of Philosophy*.

Prerequisite: **Philosophy 111** or **112**.

340c. Contemporary Ethical Theory. Spring 1995. MR. SIMON.

Examines debates in recent ethical theory, including the fact/value problem, cognitivism versus non-cognitivism, naturalism versus non-naturalism, realism versus anti-realism, moral skepticism, and the relation of ethics to science. Readings include works of Moore, Frankena, Ayer, Stevenson, Hare, Foot, Harman, Mackie, Brink, and Williams.

Prerequisite: **Philosophy 112** or permission of the instructor.

[341c. Twentieth-Century Continental Philosophy.]**392. Advanced Topics in Environmental Philosophy.** Fall 1994.

MR. SIMON.

Examines philosophical, moral, and policy issues regarding the environmental crisis including the nature of the crisis, the meaning of sustainability, and how best to mobilize an adequate response to the crisis. (Same as **Environmental Studies 392.**)

Enrollment limited to 15 students. Preference given to senior philosophy and environmental studies majors.

290c. Intermediate Independent Study. THE DEPARTMENT.**400c. Advanced Independent Study and Honors.** THE DEPARTMENT.

Physics and Astronomy

Professor Emeritus

Elroy O. LaCasce, Jr.

Professor

Guy T. Emery, *Chair*

Associate Professors

Dale Syphers

James H. Turner

Assistant Professor

Stephen G. Naculich

Visiting Instructor

Mark Hineine

Teaching Associate

David L. Roberts

Requirements for the Major in Physics

The major program depends to some extent on the student's goals, which should be discussed with the department. Those who intend to do graduate work in physics or an allied field should plan to do an honors project. For those considering a program in engineering, consult page 30. A major student with an interest in an interdisciplinary area such as geophysics, biophysics, or oceanography will choose appropriate courses in related departments. Secondary school teaching requires a broad base in science courses, as well as the necessary courses for teacher certification. For a career in industrial management, some courses in economics and government should be included.

In any case, a major in physics is expected to complete **Mathematics 161, 171, Physics 103, 223, 227, 228**, and four more approved courses, one of which may be **Mathematics 181** or above. For honors work, a student is expected to complete **Mathematics 181**, and **Physics 103, 223, 227, 228**,

300, 310, 450, and four more courses, one of which may be in mathematics above **181**. Students interested in interdisciplinary work may, with permission, substitute courses from other departments. **Geology 265, Geophysics**, is an approved physics course.

Requirements for the Minor in Physics

The minor consists of at least four Bowdoin courses numbered **103** or higher, at least one of which is from the set of **Physics 223, 227, and 228**.

Interdisciplinary Majors

The department participates in interdisciplinary programs in chemical physics, and geology and physics. See pages 127–28.

CORE COURSES

(See also *Adjunct Courses*, page 149.)

103a. Mechanics and Matter. Every semester. Fall 1993. MR. EMERY. Spring 1994. THE DEPARTMENT.

Covers the fundamental constituents of matter, conservation laws, and forces and interactions from subatomic to molecular to macroscopic systems. Intended to give a broad overview of physics, introducing both classical and modern concepts. Three hours of laboratory work per week.

Prerequisite: Previous credit or concurrent registration in **Mathematics 161**. Students who have taken or who are taking **Chemistry 251** will not receive credit for this course. Open only to first- and second-year students in the fall.

223a. Electric Fields and Circuits. Every spring. Spring 1994. MR. TURNER.

The basic phenomena of the electromagnetic interaction are introduced. The basic relations are then specialized for a more detailed study of linear network theory. Laboratory work stresses the fundamentals of electronic instrumentation and measurement. Three hours of laboratory work per week.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or permission of the instructor.

227a. Waves and Quanta. Every fall. Fall 1993. MR. SYPHERS.

Wave motion occurs in many areas of physics. A discussion of basic wave behavior and the principle of superposition leads to a study of wave propagation and its relationship to coherence, interference, and diffraction. The wave model of the atom provides an introduction to atomic spectra. The laboratory work provides experience with optical methods and instruments.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or permission of the instructor.

228a. Modern Physics. Every spring. Spring 1994. THE DEPARTMENT.

An introduction to the basic concepts and laws of nuclear and particle physics, covering the principles of relativity and quantum theory, particle accelerators, nuclear structure and reactions, and the behavior of elementary particles. The physics of radioactivity and the biological, medical, and ecological applications of radiation are given special emphasis through weekly laboratory exercises with radioactive materials and nuclear instrumentation. Three hours of laboratory work per week.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or permission of the instructor.

229a. Statistical Physics. Every other fall. Fall 1993. MR. TURNER.

The course develops a framework capable of predicting the properties of systems with many particles. This framework, combined with simple atomic and molecular models, leads to an understanding of such concepts as entropy, absolute temperature, and the canonical distribution. Some probability theory is developed as a mathematical tool.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or permission of the instructor.

300a. Methods of Theoretical Physics. Every spring. Spring 1994.

MR. LACASCE.

Mathematics is the language of physics. Similar mathematical techniques occur in different areas of physics. A physical situation may first be expressed in mathematical terms, usually in the form of a differential or integral equation. After the formal mathematical solution is obtained, the physical conditions determine the physically viable result. Examples are drawn from heat flow, gravitational fields, and electrostatic fields.

Prerequisites: **Mathematics 181** or **223**, and **Physics 223**, **227**, or **228**, or permission of the instructor.

310a. Introductory Quantum Mechanics. Every fall. Fall 1993.

MR. NACULICH.

An introduction to quantum theory, solutions of Schroedinger equations, and their applications to atomic systems.

Prerequisites: **Physics 227** and **300**.

320a. Electromagnetic Theory. Every other fall. Fall 1993. MR. LACASCE.

First the Maxwell relations are presented as a natural extension of basic experimental laws; then emphasis is given to the radiation and transmission of electromagnetic waves.

Prerequisites: **Physics 223** and **300**, or permission of the instructor.

350a. Solid State Physics. Every other spring. Spring 1994. MR. SYPHERS.

The physics of solids, including crystal structure, lattice vibrations, and energy band theory.

Prerequisite: **Physics 310**.

370a. Advanced Mechanics. Every other fall. Fall 1994.

A thorough review of particle dynamics, followed by the development of Lagrange's and Hamilton's equations and their applications to rigid body motion and the oscillations of coupled systems.

Prerequisite: **Physics 300** or permission of the instructor.

375a. General Relativity. Fall 1993. MR. TURNER.

An introduction to tensor analysis and continuum physics in special relativity, followed by the study of tensor calculus in curvilinear coordinates and the geometry of curved manifolds. Einstein's field equations are developed and applied to gravitational radiation, spherical stars, black holes, and cosmology.

Prerequisites: **Physics 228** and **300**.

380a. Elementary Particles and Nuclei. Every other spring. Spring 1995.

The phenomenology of elementary particles and of nuclei, their structure and interactions, the application of symmetry principles, and the experimental methods used in these fields.

Prerequisite: **Physics 310**.

400a. Advanced Independent Study. THE DEPARTMENT.

Topics to be arranged by the student and the staff.

Prerequisite: Normally, a previous physics course at the 300 level.

450a. Honors. THE DEPARTMENT.

Programs of study are available in semiconductor physics, microfabrication, superconductivity and superfluidity, the physics of metals, general relativity, biophysics, and nuclear physics. Work done in these topics normally serves as the basis for an honors paper.

Prerequisite: **Physics 310**.

ADJUNCT COURSES

19a. Autobiography in Science. Spring 1994. MR. HINELINE.

(For a full description of first-year seminars, see pages 94–100.)

62a. Contemporary Astronomy. Spring 1994. MR. ROBERTS.

A generally qualitative discussion of the nature of stars and galaxies, stellar evolution, the origin of the solar system and its properties, and the principal cosmological theories. Enrollment limited to 50 students. Students who have taken or who are taking **Physics 103** will not receive credit for this course.

63a. Physics of the Twentieth Century: The Nature of Problems.

Every fall. MR. HINELINE.

Explores the growth of twentieth-century physics, its institutions, and its relationship to modern statecraft. Topics include knowledge-making and problem-solving in experimental and theoretical physics, the role of physics in national security and the national economy, and the difficulty of distinguishing between “pure” and “applied” science.

Prerequisite: Ordinary secondary school mathematics. Enrollment is limited to 50 students. Students who have taken or who are taking Physics 103 will not receive credit for this course.

240a. Digital Electronics. Every other fall. Fall 1994.

An introduction to the basic principles of binary circuits and digital electronics. Topics include Boolean algebra and logic circuitry, binary numbers and computation, memory circuits and information storage, digital/analog conversion, and circuits for timing and control. The structure of digital instruments, calculators, and computers is covered as time permits. Laboratory work with digital integrated circuits.

Prerequisite: A grade of at least C in **Physics 103**.

[250a. **Topics in Physics: Physical Acoustics.**]

[255a. **Physical Oceanography.**]

[260a. **Biophysics.**]

262a. Astrophysics. Every other fall. Fall 1994.

A quantitative discussion that introduces the principal topics of astrophysics, including stellar structure and evolution, planetary physics, and cosmology.

Prerequisite: A grade of at least C in **Physics 103**.

290a. Intermediate Independent Study. THE DEPARTMENT.

Topics to be arranged by the student and the staff. If the investigations concern the teaching of physics, this course may satisfy certain of the requirements for the Maine State Teacher's Certificate.

Prerequisite: Normally, a previous physics course at the 200 level.

Psychology

Professors

Alfred H. Fuchs

Barbara S. Held*

Associate Professors

Guenter H. Rose**, *Director*
of the Psychobiology Program

Paul E. Schaffner

Melinda Y. Small, *Chair*

Assistant Professor

Suzanne B. Lovett**

Visiting Assistant Professor

Daniel D. Kurylo

Visiting Instructor

Susan A. Burggraf

The Department of Psychology comprises two programs: psychology and psychobiology. Students may elect a major within the psychology program, or they may elect an interdisciplinary major in neuroscience, sponsored jointly by the psychobiology program and the biology department (see Neuroscience, pages 140–41). The program in psychology examines contemporary perspectives on principles of human behavior, in areas ranging from cognition, language, and neurophysiology to interpersonal relations, psychopathology, and problem solving. Its approach emphasizes scientific

methods of inquiry and analysis. The program in psychobiology examines the interrelations among biological, psychological, and environmental factors in the study of normal and abnormal behavior.

Requirements for the Major in Psychology

The psychology major includes a total of nine courses numbered 100 or above. These courses are selected by students with their advisors and are subject to departmental review. The nine courses include **Psychology 101**, **Psychology 250**, two psychology laboratory courses numbered 260–279, which must be taken after statistics and if possible before the senior year, and two courses numbered 300–399. At least one laboratory course must be numbered 270–279. Majors are encouraged to consider an independent study course on a library, laboratory, or field research project during the senior year. Any one or two of the following psychobiology courses may count toward the nine-course requirement for the psychology major, but not toward the laboratory or advanced course requirement: **200**, **230**, **245**, **265**, **300**, and **330**.

Requirements for the Minor in Psychology

The psychology minor consists of five courses numbered 100 or above, including **Psychology 101**, **Psychology 250**, and one psychology laboratory course numbered 260–279. Any one of the following psychobiology courses may be included in the psychology minor: **200**, **230**, **245**, **265**, **300**, and **330**.

Students who are interested in teaching as a career should consult with the Department of Education for courses to be included in their undergraduate program. Ordinarily, students of education will find much of relevance in **Psychology 210**, **214**, **270**, and **361**; these courses cover the topics usually included in educational psychology. In addition, prospective teachers may find **Psychology 211**, **212**, and **320** compatible with their interests and helpful in their preparation for teaching.

Requirements for the Major in Neuroscience

See Neuroscience, pages 140–41.

COURSES IN PSYCHOLOGY

Introductory Course

101b. Introduction to Psychology. Every semester. THE DEPARTMENT.

A general introduction to the major concerns of contemporary psychology, including psychobiology, perception, learning, cognition, language, development, personality, intelligence, and abnormal and social behavior. Recommended for first- and second-year students. Juniors and seniors should enroll in the spring semester.

Intermediate Courses**209b. Psychology of Women.** Spring 1994. Ms. BURGGRAF.

An examination of psychological theories as they pertain to women's behavior and experience, real and imagined gender differences, and gender bias in psychological research. Violence toward women, women and mental health, sexuality, ethnicity, and culture are also considered in an attempt to more fully understand the behavior and psychological experience of women.

Prerequisite: **Psychology 101.**

210b. Infant and Child Development. Every spring. Ms. BURGGRAF.

A survey of major changes in psychological functioning from conception through adolescence. Several theoretical perspectives are used to consider how physical, personality, social, and cognitive changes jointly influence the developing child's interactions with the environment.

Prerequisite: **Psychology 101.**

211b. Personality. Every fall. Ms. BURGGRAF.

A comparative survey of theoretical and empirical attempts to explain personality and its development. The relationships of psychoanalytic, interpersonal, humanistic, and behavioral approaches to current research are considered.

Prerequisite: **Psychology 101.**

212b. Social Psychology. Every spring. MR. SCHAFFNER.

A survey of theory and research on psychological aspects of social behavior. Topics include conformity, self-concept, social cognition, attitudes, prejudice and racism, interpersonal relationships, and group conflict. Class research projects supplement readings and lectures.

Prerequisite: **Psychology 101** or **Sociology 101.**

213b. Adult Development and Aging. Every fall. MR. FUCHS.

An examination of research and theory relevant to the understanding of the changes that occur from early adulthood to later years. Particular emphasis is placed on issues in the research on aging and changes in individual functioning associated with age.

Prerequisite: **Psychology 101.**

214b. Learning and Behavior. Every fall. MR. FUCHS.

Examines the methodologies, phenomena, and theories of classical and operant conditioning and current research on animal cognition.

Prerequisite: **Psychology 101.**

222b. Law and Psychology. Every other year. Spring 1995. Ms. HELD.

Presents topic areas where there is an interface between psychological and legal issues. The first half of the course emphasizes how psychologists can study and aid the legal process. The second half emphasizes the special concerns of the mental health professional within the legal system.

Prerequisite: **Psychology 101**. Enrollment limited to 30 students. No first-year students admitted.

225b. Organizational Behavior. Every spring. MR. SCHAFFNER.

Examines the experience of work in modern human organizations through readings and discussion on six themes: psychological aspects of work within organizations; work motivation, commitment, and satisfaction; affective and cognitive aspects of work; interpersonal influence, communication, and group dynamics; problem recognition and decision making; and the enactment of organizational change.

Prerequisites: **Psychology 101** or **Sociology 101**, and junior or senior standing.

250b. Statistical Analysis. Every fall. MS. LOVETT.

An introduction to the use of descriptive and inferential statistics and design in behavioral research. Weekly laboratory work in computerized data analysis. Required of majors no later than the junior year, and preferably by the sophomore year.

Prerequisite: **Psychology 101** or permission of the instructor.

260b. Abnormal Personality. Every spring. MS. HELD.

A general survey of the nature, etiology, diagnosis, and treatment of common patterns of mental disorders. The course may be taken for one of two purposes:

Section A. Laboratory course credit.

Prerequisites: **Psychology 211** and **Psychology 250**. Enrollment limited to 14 students, who will participate in a supervised practicum at a local psychiatric unit.

Section B. Non-laboratory course credit.

Prerequisite: **Psychology 211**. Participation in the practicum is optional, contingent upon openings in the program.

270b. Cognition. Every fall. MRS. SMALL.

An analysis of research methodology and experimental investigations in cognition, which includes attention, memory, comprehension, thinking, and problem solving. Laboratory work, including experimental design.

Prerequisites: **Psychology 101** and **250**.

271b. Language: A Developmental Perspective. Spring 1995. MS. LOVETT.

Major aspects of how we produce and understand language are considered by examining research and theory concerning how language develops in both normal and atypical populations and how early language is similar to or different from adult language. Students design and execute research projects in weekly laboratory work.

Prerequisites: **Psychology 101**, **210**, and **250**, or permission of the instructor.

272b. Research in Social Behavior. Every fall. MR. SCHAFFNER.

A laboratory course on research design and methodology in social and personality psychology, focusing on a topic of current theoretical importance. Students plan and carry out original research.

Prerequisites: **Psychology 211** or **212**, and **250**.

Advanced Courses**300b. Topics in Psychology: Intelligence Testing.** Spring 1994.

MR. FUCHS.

An examination of the origins of mental testing and theories of intelligence from their beginnings in the nineteenth century to the present, with attention to the issues and the individuals identified with the controversies over the nature of intelligence.

310b. Clinical Psychology. Every fall. MS. BURGGRAF.

The history and development of clinical psychology, including an emphasis on current controversies regarding ethical and legal issues. Major portions of the course are devoted to theory and research concerning psychological assessment and types of psychotherapies.

Prerequisite: **Psychology 260**.

311b. History of Psychology. Spring 1994. MR. FUCHS.

An examination of the historical development of the methods, theories, and data of psychology as it has emerged as a field of inquiry, an academic discipline, and a profession in the past 150 years.

Prerequisites: At least three courses in psychology beyond the introductory level, or permission of the instructor.

320b. Social Development. Every other year. Fall 1993. MS. LOVETT.

The development of social behavior and social understanding from infancy to early adulthood. Emphasis on empirical research and related theories of social development. Topics include the development of aggression, altruism, morality, prejudice and racism, sex-role stereotypes and sex-appropriate behavior, and peer relationships, as well as the impact of parent-child relationships on social development.

Prerequisites: **Psychology 210** and **250**.

323b. Political Psychology. Every other year. Fall 1994. MR. SCHAFFNER.

An analysis of psychological aspects of political behavior, considering both prominent figures and the general public. Topics include the psychological foundations of politics; ideology and structure of belief systems; activism and alienation; political socialization; power tactics; the rationality of political choice; leadership; social change; and psychobiography.

Prerequisites: At least three courses in psychology beyond the introductory level, including either **Psychology 211** or **212**.

361b. Cognitive Development. Every spring. MRS. SMALL.

The development of mental representation and cognitive processes from infancy to early adulthood. Emphasis on experimental research and related theories of cognitive development, especially on the development of perception, memory, learning, comprehension, thinking, and problem solving.

Prerequisites: **Psychology 250**, and **Psychology 210** or **270**.

[362b. Infancy.]**290b. Intermediate Independent Study.****400b. Advanced Independent Study and Honors.****COURSES IN PSYCHOBIOLOGY****50a. Mind and Brain: Historical and Contemporary Issues.** Every other year. Fall 1993. MR. ROSE.

What are the influences now and in the past that determine an accepted view of the biological basis of "human nature"? This course examines the interaction of historical, philosophical, sociopolitical, technological, and personal factors that preceded and led to modern views of our normal and abnormal behaviors. Contemporary issues include an analysis of genetics and behavior; psychopharmacology; biological explanations of crime, mental illness, sexual preferences, etc.; bias in biology and its role in determining social policy; and cross-cultural comparisons between Western and Eastern illness and treatment systems.

60a. Drugs, Culture, and Human Behavior. Fall 1995. MR. ROSE.

An introductory survey of psychoactive drugs and plants, toxins, and other chemicals that alter human behavior as used in various cultures. Following a historical introduction and an overview of drug action mechanisms, each chemical group is discussed from the following perspectives: history of use, specific modes of action, physical and psychological effect, reasons for use (religious, recreational, industrial, etc.), cultural influences, and potential hazards and treatments. Topics include alcohol and other depressants, cocaine and other stimulants, psychedelics and hallucinogens, psychotherapeutics, medicinal plants, drugs and sports, drugs in food and food as drugs, environmental toxins, and contraceptives.

[200b. Comparative Psychology.]**230a. Sensation and Perception.** Every spring. MR. KURYLO.

A survey of the basic phenomena and problems of perception and sensory psychology. Topics include psychophysics; coding of qualities such as color, form, pitch, touch, pain; the influence of early experience, attention, individual differences, culture, and altered states of consciousness; and an examination of abnormal perceptions (dyslexia, aphasia, etc.), including their diagnosis and treatment. There will be a weekly lab.

Prerequisite: **Psychology 101**.

245a. Human Neuropsychology. Every fall. MR. KURYLO.

An in-depth survey of experimental and clinical approaches in the study of brain-behavior relationships of higher processes, in normal and brain-damaged humans. Topics include assessment of normal sensory-motor, attentional, memory, and language functions by behavioral and neurophysiological techniques; higher-function changes during development and with aging; the sensory-motor and cognitive effects of damage to specific regions of the brain; clinical studies as a clue to normal functions; and Asian versus Western approaches to structure and function of higher processes.

Prerequisite: **Psychology 101** or **Biology 101**.

255a. Visual Neuroscience. Fall 1993. MR. KURYLO.

Examines the major issues in the study of the mammalian visual system. Studies how physical stimuli are transduced into neural signals and how the brain processes these signals to derive our vibrant and detailed perception of the visual world. Visual information processing is examined separately at the retinal, precortical, sensory cortical, and cortical association levels. The impact of neuropathology at each level of processing on visual perception is also discussed. A review is made of current research literature in the fields of neurophysiology, psychophysics, and anatomy as they relate to the visual system. Topics include the perception of color, motion, depth, and form.

Prerequisite: **Psychology 101** or **Biology 101**.

265a. Psychobiology. Every fall. Fall 1993. MR. ROSE.

The biological correlates of behavior, with special emphasis on the neurosciences. Topics include neurophysiology, psychopharmacology, perceptual systems, brain mechanisms in sleep and wakefulness, normal and abnormal emotional behaviors, learning, memory, and higher functions, as well as the neuropsychology of brain-damaged individuals. Ethical and political implications of neuroscience are also discussed. Laboratory experience emphasizes human electrophysiological recordings, including central (EEG, evoked potentials), peripheral (EMG), and autonomic nervous system (EKG, etc.) measures.

Prerequisite: **Psychology 101** or **Biology 101**.

300a. Psychopharmacology. Every other year. Fall 1994. MR. ROSE.

An advanced study of psychoactive drugs, their neural mechanisms of action, and their effects on animal and human behavior. Topics include experimental techniques in psychopharmacology; neuropharmacology; and the analysis of the interactive effects of neurotransmitters and drugs on behavior. This is followed by an in-depth analysis of depressants, stimulants, narcotic analgesics, antipsychotics, and psychedelics; drug addiction and treatment; ethnopharmacology, emphasizing nontraditional or non-Western medicinal/ritualistic uses of organic and inorganic substances; and implications of drug effects for neurochemical theories of behavior.

Prerequisites: **Psychobiology 265**, **Biology 114**, or **Biology 203**, and permission of the instructor.

310a. Cognitive Neuroscience. Spring 1994. MR. KURYLO.

A survey of brain/behavior relationships that have been derived from modern interdisciplinary approaches combining research from psychobiology, neuroscience, and cognitive psychology. Examines the specific neural circuitry and mechanisms of high-order cognitive functions, including memory, attention, language, perception, spatial abilities, motivation, and emotion.

Prerequisite: **Psychobiology 265**.

315a. Sensory/Motor Transformation. Fall 1994. MR. KURYLO.

Examines cortical and subcortical mechanisms that underlie stimulus/response associations. These processes are explored as a unified system that includes the encoding of sensory information, extraction of relevant stimulus features, decisions based upon association history, behavioral command functions, and motor sequencing programs that specify behavioral responses.

Prerequisite: **Psychobiology 265**.

[330a. Advanced Seminar: Current Trends and Controversies in Psychobiology.]**290a. Intermediate Independent Study.** THE DEPARTMENT.**400a. Advanced Independent Study and Honors.** THE DEPARTMENT.

Religion

Professors

John C. Holt†

Burke O. Long, *Chair*

Visiting Associate Professor

Gunapala Dharmasiri

Assistant Professor

Irena S. M. Makarushka

Visiting Assistant Professor

Deborah A. Soifer

The Department of Religion offers students opportunities to study the major religions of the world, East and West, ancient and modern, from a variety of academic viewpoints and without sectarian bias.

Each major is assigned a departmental advisor who assists the student in formulating a plan of study in religion and related courses in other departments. The advisor also provides counsel in vocational planning and graduate study.

Requirements for the Major in Religion

The major consists of at least nine courses in religion approved by the department. Required courses include **Religion 101** (Introduction to the Study of Religion), **Religion 102** (Asian Religious Thought; same as **Asian Studies 101**), and **Religion 103** (Introduction to Western Religious Thought); two courses at the 200 level in Western or Asian religions; and one advanced topics seminar numbered 390 or higher.

No more than four courses below the 200 level, including one first-year seminar, may be counted toward the major. **Religion 101, 102, or 103**

normally should be taken by the end of the sophomore year. Concurrent enrollment among these three courses is permissible. In order to enroll in the 390-level seminar, a major normally will be expected to have taken five of the nine required courses. This seminar is also open to qualified nonmajors with permission of the instructor.

Interdisciplinary Major

The department participates in an interdisciplinary program in art history and religion. See page 126.

Independent Study

A student proposing to undertake an independent study project under the supervision of a faculty member of the department must submit, not later than April 1 or November 1 of the semester *before* he or she wishes to pursue the project, a plan for it on a form to be obtained from the department. The department faculty will review applications and only on the basis of its approval may the project be undertaken. This regulation also applies to honors proposals.

Honors in Religion

Students contemplating honors candidacy should possess a record of distinction in departmental courses, including those that support the project, a clearly articulated and well-focused research proposal, and a high measure of motivation and scholarly maturity. It is recommended that such students incorporate work in the majors' seminar (**Religion 390**) as part of their honors project or complete *two semesters* of independent study in preparing research papers for honors consideration.

Requirements for the Minor in Religion

A minor consists of five courses—**Religion 101**, two intermediate-level (200) courses from a core area, and two more courses at the 200 level or higher. Among these electives beyond **Religion 101**, at least one course shall be in Western religions and one in Asian religions.

First-Year Seminars

These courses are introductory in nature, focusing on the study of a specific aspect of religion, and may draw on other fields of learning. They are not intended as prerequisites for more advanced courses in the department unless specifically designated as such. They include readings, discussions, reports, and writing. Topics change from time to time to reflect emerging or debated issues in the study of religion.

Enrollment is limited to 16 students for each seminar. First-year students are given priority for available spaces. Seminars may be repeated for credit with the contents changed.

12c,d. Building the World: Mythologies and Societies. Fall 1993.

Ms. SOIFER.

*(For a full description of first-year seminars, see pages 94–100.)***Introductory Courses****101c. Introduction to the Study of Religion.** Fall 1993. MR. LONG.

Fall 1994. Ms. MAKARUSHKA.

Basic concepts, methods, and issues in the study of religion, with special reference to examples comparing and contrasting Eastern and Western religions. Lectures, discussions, and readings in classic texts and modern interpretations.

102c,d. Asian Religious Thought. Fall 1993. MR. SMITH. Spring 1994.

Ms. SOIFER.

Examines basic principles, themes, and conflicts in the religio-cultural thought of Asian civilizations, primarily through the study of classical texts of India, China, and Japan. A broadly comparative focus on these issues is applied to such texts as the *Bhagavad Gita*, the *Analects* of Confucius, and the works of the Taoist philosophers Lao-tzu and Chuang-tzu. (Same as **Asian Studies 101**.)

103c. Introduction to Western Religious Thought. Fall 1994.

Ms. MAKARUSHKA.

A study of individual and communal religious experiences expressed in genres including dialogue, autobiography, sacred scripture, treatise, mystical writing, poetry, and artworks. Focus on the historical and cultural contexts that give rise to specific notions of virtue, wisdom, and holiness.

Intermediate Courses**200c. Judaism.** Fall 1993. MR. LONG.

Varieties of Jewish experience and expression in lifestyles of Torah, philosophy, and mysticism. Historical developments, continuity, and change. Modulation of traditional practice and interpretation under the press of developments such as the Nazi Holocaust, secular and religious Zionisms, and liberationist movements.

Prerequisite: Any 100-level course in religion, or permission of the instructor.

201c. Christianity. Spring 1994. MR. LONG.

The varieties of Christian experience and expression; patterns and structures of Christian life such as conversion, creed, ritual dramas, and church. Attention is paid to historical developments, continuities, and change, as well as to modern realities of particular import for Christianity, such as cultural pluralism, disbelief, and liberationist movements.

Prerequisite: Any 100-level course in religion, or permission of the instructor.

202c. Jewish Origins. Fall 1994. MR. LONG.

A study of the ways in which Jews interacted with one another and non-Jews in the Graeco-Roman world and created the foundations for Judaisms of modern times. Considers paradigmatic texts and events that shaped early Jewish thought and practice, and which still influence scholarly investigations of Jewish origins. Analysis of primary sources along with modern interpretations.

Prerequisite: Any 100-level course in religion, or permission of the instructor.

203c. Christian Origins. Spring 1995. MR. LONG.

A study of the varieties of Christian expression in relation to other cultures of the Graeco-Roman world. Considers paradigmatic texts that shaped early Christian thought and practice, and which continue to influence modern investigations of Christian beginnings. Analysis of primary sources along with modern interpretations.

Prerequisite: Any 100-level course in religion or permission of the instructor.

204c. The Bible in Literary Focus. Spring 1994. MR. LONG.

A study of selected narratives and poems, with emphasis on the diverse imaginative worlds of the Bible and, accordingly, on various modern approaches to literary study. Attention is also given to the Bible as a wellspring of images and motifs for Western literary artists. (Same as **English 103.**)

[220c,d. Religion in Ancient India.]

(Same as **Asian Studies 240.**)

[221c,d. Religion in Medieval and Modern India.]

(Same as **Asian Studies 241.**)

222c,d. Buddhist Thought. Fall 1993. MR. DHARMASIRI.

Examines principal categories of Buddhist religious thought as they arise in representative genres of Buddhist literature, especially the Sanskrit *Sutras* of Mahayana tradition. (Same as **Asian Studies 242.**)

Prerequisite: **Religion 101** or **102**, or permission of the instructor.

[223c,d. Buddhism, Culture, and Society.]

(Same as **Asian Studies 243.**)

224c,d. Taoism and Tantra. Fall 1993. MR. DHARMASIRI.

An introduction to the basic principles of religious thought articulated in the fundamental texts (*Tao Te Ching* and *Chuang Tzu*) of earlier philosophical Taoism in China, a consideration of later forms of religious Taoism, and an examination of comparable principles in Buddhist tantric traditions (*Vimalakirti*, *Hevajra Tantra*, *The Tibetan Book of the Dead*, and *Dzog Chen*). Readings from primary sources and modern interpretations. (Same as **Asian Studies 244.**)

Prerequisite: **Asian Studies 101/Religion 102** or permission of the instructor.

225c,d. Buddhist Ethics. Spring 1994. MR. DHARMASIRI.

An exploration of Theravada and Mahayana religious worldviews with an emphasis on the nature of ethical action. Themes to be explored include the fundamental Buddhist theory of action (*karma*), rebirth, intention, love, altruism, equality, monastic moral discipline, mindfulness, evil, emptiness, and selflessness. (Same as **Asian Studies 245**.)

Prerequisite: **Asian Studies 101/Religion 102** or permission of the instructor.

[250c. Western Religion and Its Critics.]**[251c. The Problem of Evil.]****252c. Religions in America.** Spring 1994. Ms. MAKARUSHKA.

A critical assessment of religious traditions and their impact on the development of American cultures and values. Religious experiences to be explored include Native American and African-American traditions; representative forms of Judaism, Christianity, and Islam; Asian religions, civil religion, women's religions, and utopian communities.

253c. Religion, Women, and Nature. Fall 1993. Ms. MAKARUSHKA.

Explores the relationship between religion, Western attitudes toward nature, and women's experience. Questions the underlying assumptions that determine the cultural definitions of creation, human nature, and the natural world. Feminist and ecofeminist writings provide the basis for rethinking the traditional view that women are associated with nature and men with culture. Questions concerning the interdependence of nature and culture, the attitudes of domination and participation, and the ethics of power are raised.

254c,d. Philosophy of Religion. Spring 1994. MR. DHARMASIRI.

A critical examination of fundamental themes (types of religious experience, mysticisms, gods, etc.) central to a comparative understanding of religion derived from a reading of contemporary philosophers of religion, especially the work of Ninian Smart. Considerations chiefly drawn from Buddhist and Christian traditions. (Same as **Asian Studies 247**.)

Prerequisite: **Asian Studies 101/Religion 102** or permission of the instructor.

Advanced Courses

The following courses study in depth a topic of limited scope but major importance, such as one or two individuals, a movement, type, concept, problem, historical period, or theme. Topics change from time to time. Courses may be repeated for credit with the contents changed.

390c. Religious Imagination and the Unspeakable. Fall 1993.

Ms. MAKARUSHKA.

A study of Western and Asian literary texts that question the possibility of meaning after such cataclysmic events as the Holocaust, Hiroshima, and nuclear or environmental disaster. Through a multiplicity of interpretative

strategies, the transformation of concepts of history, language, and meaning are considered as part of the process of rethinking religious 'truth' and the study of religions.

Prerequisites: **Religion 101** and any 200-level course in religion, or permission of the instructor.

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Romance Languages

Professors

Clifford R. Thompson**

John H. Turner

Associate Professors

Robert R. Nunn

Françoise Dupuy Sullivan†

William C. VanderWolk, *Chair*

Assistant Professors

Marie E. Barbieri

Karin Dillman

Janice A. Jaffe†

Lecturers

Celeste D. Mann

Rosa Pellegrini

Visiting Lecturer

Marie-Josephe Silver

Teaching Fellows

Marianne Morvan

Rubén Pérez M.

Nadine Vallejos

The Department of Romance Languages offers courses in French, Spanish, and Italian language and literature. Native speakers are involved in most language courses. Literature courses are conducted in the respective language.

Study Abroad

A period of study in an appropriate country, usually in the junior year, is strongly encouraged for all students of language. Bowdoin College is affiliated with a wide range of programs abroad, and interested students should seek the advice of a member of the department early in their sophomore year.

Independent Study

This is an option primarily intended for students who are working on honors projects. It is also available to students who have taken advantage of the regular course offerings and wish to work more closely on a particular topic. Independent study is not an alternative to regular course work. An application should be made to a member of the department prior to the semester in which the project is to be undertaken and must involve a specific proposal in an area in which the student can already demonstrate knowledge.

Honors in Romance Languages

Majors may elect to write an honors project in the department. This involves two semesters of independent study in the senior year and the writing of an honors essay and its defense before a committee of members of the department. Candidates for department honors should also have a strong record in other courses in the department.

Requirements for the Major in Romance Languages

The major consists of eight courses more advanced than **French 204** or **Spanish 204**. The major may consist entirely of courses in either French or Spanish, or it may involve a combination of courses in French and Spanish. It is expected that majors who are not writing an honors project will enroll in a 300-level course in their senior year. No more than two courses may be in independent study, and no fewer than four Bowdoin courses should be taken. Prospective majors are expected to have completed **French** or **Spanish 205** and **206** or **209** before the end of their sophomore year.

Requirements for the Minor in Romance Languages

The minor consists of three Bowdoin courses in one language above 204.

Placement

Students who plan to take French or Spanish must take the appropriate placement test at the beginning of the fall semester.

FRENCH

101c, 102c. Elementary French. Every year. Fall 1993. Ms. SILVER.
Spring 1994. MR. NUNN.

A study of the basic forms, structures, and vocabulary. Emphasis on listening comprehension and spoken French. During the second semester, more stress is placed on reading and writing. Three hours per week, plus regular language laboratory assignments and conversation sessions.

Prerequisite: **French 101** is open to first- and second-year students who have had two years or less of high school French. *Juniors and seniors wishing to take French 101 must have the permission of the instructor.*

[119c. Seminars for First- and Second-Year Students.]

203c. Intermediate French I. Every fall. Fall 1993. Ms. SILVER.

A review of basic grammar, which is integrated into more complex patterns of written and spoken French. Short compositions and class discussions require active use of students' acquired knowledge of French.

Prerequisite: **French 102** or placement.

204c. Intermediate French II. Every spring. Spring 1994. Ms. DILLMAN.

Continued development of oral and written skills; course focus shifts from grammar to reading. Short readings from French literature, magazines, and newspapers form the basis for the expansion of vocabulary and analytical skills. Active use of French in class discussions and conversation sessions with French assistants.

Prerequisite: **French 203** or placement.

205c. Advanced French I. Every fall. Fall 1993. MR. NUNN AND MS. DILLMAN.

An introduction to a variety of writing styles and aspects of French culture through readings of literary texts, magazines, and newspapers. Emphasis on student participation, including short oral presentations.

Prerequisite: **French 204** or placement.

206c. Advanced French II. Every spring. Spring 1994. MR. VANDERWOLK AND MR. NUNN.

Intensive course in composition and conversation. Compositions and conversations based on analysis of literary texts and films. Active use of the language through presentation of short theater pieces.

Prerequisite: **French 205** or placement.

209c. Introduction to the Study and Criticism of French Literature. Every fall. Fall 1993. MR. VANDERWOLK.

An introduction to the appreciation and analysis of the major genres of literature in French through readings and discussions of important works from the Renaissance to the twentieth century. Students are introduced to critical approaches to literature in general and to French literature in particular. Writers likely to be considered include Ronsard, La Fontaine, Molière, Voltaire, Flaubert, Sartre, and Yourcenar. Conducted in French.

Prerequisite: **French 205** or placement.

[**310c. Looking Through a Lens: Framing the Scene.**]

312c. French Thought: Penseurs, Moralistes, Philosophes. Fall 1993. MR. NUNN.

Emphasis on the texts of the seventeenth and eighteenth centuries which have had a major influence on French thought. Principal authors: Montaigne (*Essais*), Descartes (*Discours de la méthode*), Pascal (*Pensées*), Molière (*Tartuffe*), La Fontaine (*Fables*), La Bruyère (*Caractères*), La Rochefoucauld (*Maximes*), La Fayette (*La Princesse de Clèves*), Voltaire (*Lettres philosophiques*), Diderot (*Supplément au voyage de Bougainville*), D'Alembert (*Discours préliminaire*), Rousseau (*Réveries d'un promeneur solitaire*). Conducted in French.

Prerequisite: **French 209** or permission of the instructor.

313c. Poetry and Society. Fall 1993. MS. DILLMAN.

A study of the language of nineteenth-century French poetry in a cultural and historical context.

Prerequisite: **French 209** or permission of the instructor.

[**314c. Twentieth-Century French Poetry and the Francophone Tradition.**]

315c. French Drama I. Spring 1995. MR. NUNN.

French drama of the seventeenth and eighteenth centuries. A survey of classicism and the major new currents of the eighteenth century. Plays by

Corneille, Molière, Racine, Marivaux, Beaumarchais, and others are studied. Close interpretive reading of texts and viewing of taped performances. Conducted in French.

Prerequisite: **French 209** or permission of the instructor.

316c. French Dramatic Performance (French Drama II). Spring 1994. MR. VANDERWOLK.

Students perform short plays in French by authors such as Molière, Ionesco, Camus, Beckett, Anouilh, and Sarraute. Conducted in French.

Prerequisite: **French 209** or permission of the instructor.

317c. The French Novel in the Nineteenth Century (The French Novel I). Fall 1994.

The development of the genre during the nineteenth century, with emphasis on the works of Balzac, Stendhal, Flaubert, and Zola. Conducted in French.

Prerequisite: **French 209** or permission of the instructor.

318c. Realism to Postmodernism in the Twentieth-Century French Novel (The French Novel II). Fall 1993. MR. VANDERWOLK.

The development of the French novel from the tradition of nineteenth-century realism to postmodernism. Close attention is paid to critical theory in order to redefine the novel as a genre. Authors to be studied may include Proust, Gide, Malraux, Sartre, Yourcenar, Camus, and Duras. Conducted in French.

Prerequisite: **French 209** or permission of the instructor.

319c. French Women Writers. Spring 1994. MS. DILLMAN.

An exploration of writing and love in novels by de Staël, Sand, Colette, and Duras. Conducted in French.

Prerequisite: **French 209** or permission of the instructor.

[**320c, 321c. Topics in French Literature and Culture I.**]

400c. Independent Study. THE DEPARTMENT.

ITALIAN

101c, 102c. Elementary Italian. Every year. MS. PELLEGRINI.

Three class hours per week, plus drill sessions and language laboratory assignments. Study of the basic forms, structures, and vocabulary. Emphasis in the first semester is on listening comprehension and spoken Italian. In the second semester, more attention is paid to reading and writing.

203c, 204c. Intermediate Italian. Every year. MS. PELLEGRINI.

Three class hours per week and one weekly conversation session with assistant. Aims to increase fluency in both spoken and written Italian. Grammar fundamentals are reviewed. Class conversation and written assignments are based on contemporary texts of literary and social interest.

Prerequisite: **Italian 102** or permission of the instructor.

SPANISH

101c, 102c. Elementary Spanish. Every year. Fall 1993. Ms. BARBIERI. Spring 1994.

Three class hours per week, plus drill sessions and laboratory assignments. An introduction to the grammar of Spanish, aiming at comprehension, reading, writing, and simple conversation. Emphasis in the first semester is on grammar structure, with frequent oral drills. In the second semester, more attention is paid to reading and writing.

Prerequisite: **Spanish 101** is open to first- and second-year students who have had less than two years of high school Spanish. Juniors and seniors wishing to take **Spanish 101** must have the permission of the instructor.

203c, 204c. Intermediate Spanish. Every year. Fall 1993.

MR. THOMPSON AND Ms. BARBIERI. Spring 1994. MR. TURNER.

Three class hours per week and a conversation session with the teaching assistant. Grammar fundamentals are reviewed. Class conversation and written assignments are based on readings in modern literature.

Prerequisite: **Spanish 102** or placement.

205c. Advanced Spoken and Written Spanish. Every fall. MR. TURNER.

Intended to increase proficiency in the four skills. A variety of texts are assigned with the aim of improving speed and accuracy of reading, and they also serve as the basis for controlled discussion aimed at spoken fluency. Visual media are used to develop aural comprehension and as the basis for the study of culture. Frequent written assignments.

Prerequisite: **Spanish 204** or placement.

209c. Introduction to the Study and Criticism of Hispanic Literature. Every spring. Ms. BARBIERI.

Intended to develop an appreciation of the major genres of literature in Spanish and to foster the ability to discuss them orally and in writing. Personal responses as well as the use of critical methods are encouraged in discussions. Conducted in Spanish.

Prerequisite: **Spanish 205** or permission of the instructor.

311c. Medieval and Golden Age Spanish Literature. Every year. Fall 1993. MR. THOMPSON.

Readings from the major writers of the Spanish Renaissance and the baroque period. Conducted in Spanish.

Prerequisite: **Spanish 209** or permission of the instructor.

312c. Modern Spanish Literature. Every year. Spring 1994. Ms. BARBIERI.

Readings from the major writers of Spanish literature from the eighteenth century to the modern period. Conducted in Spanish.

Prerequisite: **Spanish 209** or permission of the instructor.

313c,d. Indigenous and Hispanic Literature of Colonial Latin America. Fall 1994.

Introduction to the literature of the encounter between indigenous and Hispanic cultures in Latin America from the fifteenth through the eighteenth centuries. Emphasis on understanding the cultural and racial heterogeneity of Latin American society through its foundational texts. Conducted in Spanish.

Prerequisite: **Spanish 209** or permission of the instructor.

314c,d. Modern Spanish-American Literature. Spring 1995. MR. TURNER.

An introduction to modern Spanish-American literature from modernism to the generation of the Boom. Conducted in Spanish.

Prerequisite: **Spanish 209** or permission of the instructor.

320c-329c. Topics in Spanish and Hispanic-American Literature I and II. Every year.

Designed to provide students who have a basic knowledge of literature in Spanish the opportunity to study more closely an author, a genre, or a period. **Spanish 320** and **321** may be repeated for credit with the contents changed. Conducted in Spanish.

Prerequisites: Any two of **Spanish 311, 312, 313, and 314**, or permission of the instructor.

320c. Spanish Civilization. Fall 1993. MS. BARBIERI.

An introduction to the multiple elements constituting Spanish culture, with a particular focus on contemporary Spain. Texts include essays, novels, newspaper articles, and films.

321c,d. Latin American Civilization. Spring 1994.

An introduction to the major aspects of the culture of Latin America through a variety of texts, including literature, essay, and film.

322c,d. Women Writers of Latin America. Fall 1993.

Readings in modern literature written by women in Latin America. Authors include Isabel Allende, Claribel Alegría, Marta Traba, and Luisa Valenzuela.

323c. The Poetic Tradition in Spanish. Spring 1994. MR. TURNER.

A study of the development of poetry in Spanish from its earliest manifestations in the ninth century to the present day in Spain and Latin America.

325c,d. The Island and Identity in Hispanic Caribbean Literature. Spring 1994. MS. MANN.

Readings in prose and poetry of the islands of the Spanish-speaking Caribbean, with emphasis on the theme of the search for identity.

[350c. Modern Spanish-American Literature in English Translation.]**400c. Independent Study and Honors.** THE DEPARTMENT.

Russian

Professor

Jane E. Knox-Voina

Associate Professor

Raymond H. Miller, *Chair*

Teaching Fellow

Leah G. Shulsky

Requirements for the Major in Russian Language and Literature

The Russian major consists of ten courses (eleven for honors). These include **Russian 101, 102 and 203, 204**; five courses in Russian above **Russian 204**; and one approved course in either Russian literature in translation or Slavic civilization, or an approved related course in government, history, or economics (e.g., **Economics 214; Government 230 and 271; History 217 and 218**).

Study Abroad

Students are encouraged to spend at least one semester in Russia. At least two advanced Russian students will be chosen each year to study for two semesters in Russia as part of the Consortium of American Colleges exchange (interested students should consult the Russian department faculty or the dean of the College). There are several other approved summer and one-semester Russian language programs in Moscow and St. Petersburg that are open to all students who have taken the equivalent of two or three years of Russian.

Advanced Independent Study

This is an option intended primarily for students who are working on honors projects. It is also available to students who have taken advantage of the regular course offerings and wish to work more closely on a particular topic. Independent study is not an alternative to regular course work. Application should be made to a member of the department prior to the semester in which the project is to be undertaken and must involve a specific proposal in an area in which the student can already demonstrate basic knowledge. Two semesters of advanced independent studies are required for honors in Russian.

Requirements for the Minor in Russian

The minor consists of seven courses (including the first two years of Russian).

101c, 102c. Elementary Russian. Every year. Fall 1993. Ms. KNOX-VOINA. Spring 1994. Mr. MILLER.

Emphasis on the acquisition of language skills through imitation and repetition of basic language patterns; the development of facility in speaking and understanding simple Russian. Conversation hour with native speaker.

203c, 204c. Intermediate Russian. Every year. Fall 1993. Mr. MILLER. Spring 1994. Ms. KNOX-VOINA.

A continuation of **Russian 101, 102**. Emphasis on maintaining and improving the student's facility in speaking and understanding normal

conversational Russian. Writing and reading skills are also stressed. Conversation hour with native speaker.

Prerequisite: **Russian 101, 102.**

305c. Advanced Reading and Composition in Russian. Every fall.

Ms. KNOX-VOINA.

Intended to develop the ability to read Russian at a sophisticated level by combining selected language and literature readings, grammar review, and study of Russian word-formation. Discussion and reports in Russian. Conversation hour with native speaker.

Prerequisite: **Russian 203, 204.**

309c. Nineteenth-Century Russian Literature. Every fall. MR. MILLER.

A survey of Russian prose of the nineteenth century. Special attention is paid to the development of Russian realism. Writers to be read include Pushkin, Lermontov, Gogol, Dostoevsky, and Tolstoy.

Prerequisite: **Russian 305.**

310c. Modern Russian Literature. Every spring. Ms. KNOX-VOINA.

An examination of various works of modern Russian literature (Soviet and émigré), with emphasis on the development of the short story. The differences and similarities between prerevolutionary and contemporary Soviet literature are discussed. Authors to be studied include Blok, Mayakovsky, Zoshchenko, Platonov, Bulgakov, Pasternak, Brodsky, Shukshin, Aksyonov, and others. Short term papers.

Prerequisite: **Russian 305.**

315c. Translation of Russian Prose. Every other spring. Spring 1994.

MR. MILLER.

Focuses on the translation of Russian prose into English. Texts are selected from nineteenth- and twentieth-century memoirs, political tracts, scholarly texts, and at least one piece of *belles lettres*. Attention is given to development of Russian reading skills; different theories of translation and typical translation strategies; Russian grammatical structures and word groups that are especially difficult to render into English; and the cultural significance of assigned texts.

Prerequisite: **Russian 305** or equivalent.

316c. Topics in Literature.

Specific literary genres or authors not covered in the other courses. This course may be repeated for credit with the contents changed.

Russian Poetry. Spring 1995. MR. MILLER.

Examines various nineteenth-century Russian poets, including Pushkin, Lermontov, and Tyutchev; selections from eighteenth-century poetry (Lomonosov and Derzhavin) will be studied for comparison, as will some later verses. Includes discussion of Russian poetics and the cultural-historical context of each poet's work. Reading and discussion are in Russian.

Prerequisite: **Russian 305** or equivalent.

290c. Intermediate Independent Study. THE DEPARTMENT.

Upon demand, this course may be conducted as a small seminar for several students in areas not covered in the above courses (e.g., the Russian media). This course may be repeated for credit with the contents changed.

Prerequisite: **Russian 305** or equivalent.

400c. Advanced Independent Study. THE DEPARTMENT.

Individual research in Russian studies. Major sources should be read in Russian. This course may be repeated for credit with the contents changed. A two-semester project is necessary for honors in Russian.

Prerequisite: **Russian 309** or **310**.

IN ENGLISH TRANSLATION

215c. Russia, the Slavs, and Europe. Every other spring. Spring 1995.

MR. MILLER.

An introduction to the cultural history of Russia and Eastern Europe, with special emphasis on the unique position Russia has occupied within European civilization. Specific topics include Russia's ethnic and linguistic background, early Russian culture, the development of Russian religious and political thought, and the problematic relationships that have existed between Russia, the other Slavic nations, and the West. No prior study of European civilization is assumed.

220c. Nineteenth-Century Russian Literature. Every other fall.

Fall 1993. MR. MILLER.

Traces the development of Russian realism and the Russian novel. Specific topics include the pre-nineteenth-century literary background, the origins of realism as a movement, and the intellectual and political milieu of the time. Writers to be read include Pushkin, Lermontov, Gogol, Goncharov, Dostoevsky, and Tolstoy. Russian majors are required to do some of the reading in Russian.

221c. Twentieth-Century Russian Literature. Every other spring.

Spring 1994. MS. KNOX-VOINA.

A two-part discussion of twentieth-century Russian prose before and after the official proclamation of socialist realism. The first part is devoted to the innovative period of modernism and the avant-garde in the 1920s. The second half examines the return to didactic realism and the emergence of an underground dissident movement. Writers to be discussed include Andreyev, Bely, Zoshchenko, Bulgakov, Sinyavsky, Solzhenitsyn, Aksyonov, and Brodsky. Russian majors are required to do some of the reading in Russian.

222c. Topics Course. THE DEPARTMENT.

Works in specific areas of Russian literature not investigated in other departmental courses. A specific author, genre, literary movement, or social phenomenon may be emphasized. This course may be repeated for credit

with the contents changed. Russian majors are required to do some of the reading in Russian. This course is offered only when staffing permits.

Women in Russian Society and Culture. Every other fall. Fall 1994.
MS. KNOX-VOINA.

Examines the roles women have played in Russian literature and Russian society. Special attention is given to women revolutionaries and the “new status” of women guaranteed by the Revolution. Readings include short stories, novels, autobiographies, and nonfiction works. Authors include Pushkin, Tolstoy, Dostoevsky, Chekhov, Kollontai, Tsvetaeva, Akhmatova, Ginzburg, and others. Russian majors are required to do some of the reading in Russian.

223c. Dostoevsky and the Novel. Every other spring. Spring 1995.
MS. KNOX-VOINA.

Examines Dostoevsky’s use of the novel to portray the “fantastic” reality of the city and its effects on the human psyche. Special attention is given to the author’s quest for guiding principles of freedom and love in a world of violence and cynicism. Emphasis on Dostoevsky’s anti-Western and antimaterialist bias in his portrayal of the struggle between extreme individualism and self-renunciation in a utopian brotherhood. Russian majors are required to do some of the reading in Russian.

Sociology and Anthropology

Professors

Craig A. McEwen, *Chair*
Daniel W. Rossides

Associate Professors

Susan E. Bell
Susan A. Kaplan

Assistant Professors

Sara A. Dickey
Nancy E. Riley

Visiting Assistant Professor

John H. Blitz

Joint Appointment with Women’s Studies
Assistant Professor Carol E. Cohn

Requirements for the Major

In consultation with an advisor, each student plans a major program that will nurture an understanding of society and the human condition, demonstrate how social knowledge is acquired through research, and enrich his or her general education. On the practical level, a major program prepares the student for graduate study in sociology and anthropology and contributes to preprofessional programs such as law and medicine. It also provides background preparation for careers in urban planning, public policy, the civil service, social work, business or personnel administration, social research, law enforcement and criminal justice, the health professions, journalism, secondary school teaching, and programs in developing countries.

A student may choose either of two major programs or two minor programs:

The major in sociology consists of ten courses, including **Sociology 101, 201, 209 or 211, and 310**. A minimum of eight courses in sociology may be supplemented by two advanced courses from anthropology or, as approved by the department chair, by two advanced courses from related fields to meet the student's special needs. **Sociology 201** should be taken in the sophomore year.

The major in anthropology consists of eight courses, including **Anthropology 101, 102, 201, and 301**, and one course with an areal focus (numbered in the 130s and 230s). Students are urged to complete **Anthropology 101, 102, and 201** as early as possible. **Anthropology 301** should be taken in the senior year. One or two of the eight courses may be taken from the advanced offerings in sociology or, as approved by the department chair, from related fields to meet the student's special needs. Study-abroad programs are encouraged as part of a student's study of other cultures.

Requirements for the Minor

The minor in sociology consists of five sociology courses, including **Sociology 201, 209 or 211, and 310**.

The minor in anthropology consists of five anthropology courses, including **Anthropology 101 and 301**, either **102 or 201**, and an area study course (130s and 230s).

For the anthropology major or minor program, one semester of independent study may be counted. For the sociology major or minor program, two semesters of independent study may be counted.

Departmental Honors

Students distinguishing themselves in either major program may apply for departmental honors. Awarding of the degree with honors will ordinarily be based on grades attained in major courses and a written project (emanating from independent study), and will recognize the ability to work creatively and independently and to synthesize diverse theoretical, methodological, and substantive materials.

SOCIOLOGY

53a. Sexuality and Human Reproduction: Biological and Sociological Perspectives. Fall 1993. Ms. DICKINSON, Ms. BELL, AND MR. PHILLIPS.

Examines human reproduction, sexuality, and in-utero embryonic development from biological, clinical, and social perspectives. Topics include the effects of social and political pressures on reproductive research, the social consequences of reproductive research, and medical treatment of the reproductive process. Students participate in debate/discussion sessions associated with course topics. Enrollment limited to 40 students. (Same as **Biology 53**.)

101b. Introduction to Sociology. Every semester. THE DEPARTMENT.

The major perspectives of sociology. Application of the scientific method to sociological theory and to current social issues. Theories ranging from social determinism to free will are considered, including the work of Marx, Weber, Durkheim, Merton, and others. Attention is given to such concepts as role, status, society, culture, institution, personality, social organization, the dynamics of change, the social roots of behavior and attitudes, social control, deviance, socialization, and the dialectical relationship between individual and society.

201b. Introduction to Social Research. Every spring. MS. RILEY.

Provides firsthand experience with the specific procedures through which social science knowledge is developed. Emphasizes the interaction between theory and research, and examines the ethics of social research and the uses and abuses of research in policy making. Reading and methodological analysis of a variety of case studies from the sociological literature. Field and laboratory exercises that include observation, interviewing, use of available data (e.g., historical documents, statistical archives, computerized data banks, cultural artifacts), sampling, coding, use of computer, elementary data analysis and interpretation. Lectures, laboratory sessions, and small-group conferences.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

204b. Families: A Comparative Perspective. Spring 1994. MS. RILEY.

Examines families in different societies. Issues addressed include definition and concept of the "family"; different types of family systems; the interaction of family change and other social, economic, and political change; the relationships between families and other social institutions; the role of gender and age in family relationships; and sources and outcomes of stability, conflict, and dissolution within families.

Prerequisite: **Sociology 101** or **Anthropology 101**.

208b,d. Race and Ethnicity. Fall 1993. MR. MCEWEN.

The social and cultural meaning of race and ethnicity, with emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons among racial and ethnic minorities in the United States and between their situations and those of minorities in other selected societies. (Same as **Africana Studies 208**.)

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

209b. Social Theory. Every fall. MR. ROSSIDES.

A critical examination of some representative theories of the nature of human behavior and society. Social theory is related to developments in philosophy and natural science, and symbolic developments as a whole are

related to social developments. The thought of some major figures in the ancient world (especially Plato, Aristotle, and the Stoics) and the medieval world (especially St. Thomas and Marsilio of Padua) is analyzed, but the main focus is on the figures who have struggled to explain the nature of modern society: Hobbes, Locke, the *philosophes*, Comte, Marx, Spencer, Durkheim, and Weber, with special attention to contemporary liberal, socialist, world-system, feminist, and environmental theorists.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

[210b. Sociology of Work and Organizations.]

211b. Classics of Sociological Theory. Fall 1993. Ms. BELL.

An analysis of selected works by the founders of modern sociology. Particular emphasis is given to understanding differing approaches to sociological analysis through detailed textual interpretation. Works by Marx, Weber, Durkheim, and selected others are read.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

213b. Social Stratification. Spring 1995. MR. ROSSIDES.

A critical examination of representative theories of inequality. Opens with a review of the basic questions and concepts in social stratification, and then develops case studies of the various types of social inequality: for example, El Salvador, Korea, and the USSR. The heart of the course is an extended analysis of the American class system to determine sources of stability and conflict, and to identify legitimate and illegitimate forms of inequality. Considerable attention is given to theories of imperialism and to determining the United States' role in the international system of stratification.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

214b. Science, Technology, and Society. Spring 1995. Ms. BELL.

A consideration of the organization of science and its place in modern society. First, identifies the social structure and dynamics of science as an institution and examines the relationship between the institution of science and the content of scientific knowledge. Explores the role of science and scientific knowledge in technological innovation. Next, examines the progress and problems associated with scientific and technological changes such as nuclear power and the production and distribution of pesticides and other chemicals. Considers the social and intellectual origins of these technological innovations and their impact on society from different theoretical perspectives.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

215b. Criminology and Criminal Justice. Spring 1994. MR. MCEWEN.

Focuses on crime and corrections in the United States, with some cross-national comparisons. Examines the problematic character of the definition

of “crime.” Explores empirical research on the character, distribution, and correlates of criminal behavior and interprets this research in the light of social structural, cultural, and social psychological theories of crime causation. Discusses the implications of the nature and causes of crime for law enforcement and the administration of justice. Surveys the varied ways in which prisons and correctional programs are organized and assesses research about their effectiveness.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

218b. Sociology of Law. Every fall. MR. MCEWEN.

An analysis of the development and function of law and legal systems in industrial societies. Examines the relationships between law and social change, law and social inequality, and law and social control. Special attention is paid to social influences on the operation of legal systems and the resultant gaps between legal ideals and the “law in action.”

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

219b. Sociology of Gender. Fall 1993. MS. RILEY.

Focuses on gender as an organizing principle of societies, and examines how gender is involved in and related to differences and inequalities in social roles, gender identity, sexual preference, and social constructions of knowledge. Explores the role of gender in institutional structures such as the economy, the family, religion, and the state. Particular attention is paid to gender systems in different cultures and societies.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

222b. Introduction to Human Population. Spring 1995. MS. RILEY.

An introduction to the major issues in the study of population. Topics include an examination of the demographic processes of fertility, mortality, and migration; the history of and explanations for fertility and mortality declines in the United States and Western Europe; recent demographic changes in Third World countries; the role of government policy in population change; and the social, economic, health, and environmental causes and impacts of population change.

Prerequisite: **Sociology 101** or **Anthropology 101**.

235b. Comparative Societies. Spring 1994. MR. ROSSIDES.

An analysis of the various types of society in human history and their interrelations. After a brief discussion of hunting-gathering, horticultural, and agrarian societies, and the hybrid societies of ancient Israel, Greece, and Rome, the course focuses on representative types of developed and developing societies in today’s world.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

[250b. Collective Behavior.]

251b. Sociology of Health and Illness. Spring 1994. Ms. BELL.

Examines the social contexts of physical and mental health, illness, and medical care. Deals with such topics as the social, environmental, and occupational factors in health and illness; the structure and processes of health care organizations; the development of health professions and the health work force; doctor-patient relationships; ethical issues in medical research; and health care and social change.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor. Not open to students who have previously taken **Sociology 151**.

252b. Sociology of Chronic Illness and Disability. Fall 1994. Ms. BELL.

Focuses on the subjective experience of illness, especially chronic illness and disability. How do people make meaning of illness? What strategies do they use in their daily lives to manage and direct the course of their illness? In what respects do these experiences vary according to such factors as gender, race, ethnicity, and social class? Issues to be addressed include uncertainty; illness career; stigma; identity; relationships with family, community, and caregivers; work; self-help and the independent living movement; feminism and disability rights.

Prerequisite: **Sociology 101** or **Anthropology 101**, or permission of the instructor.

310b. Advanced Seminar: Current Controversies in Sociology.

Spring 1994. MR. MCEWEN.

Draws together different theoretical and substantive issues in sociology in the United States, primarily since 1950. Discusses current controversies in the discipline, e.g., quantitative versus qualitative methodologies, micro versus macro perspectives, and pure versus applied work.

Prerequisites: Junior standing and two courses in sociology, or permission of the instructor.

290b. Intermediate Independent Study in Sociology. Ms. BELL, Ms. COHN, MR. MCEWEN, Ms. RILEY, AND MR. ROSSIDES.

400b. Advanced Independent Study and Honors in Sociology. Ms. BELL, Ms. COHN, MR. MCEWEN, Ms. RILEY, AND MR. ROSSIDES.

ANTHROPOLOGY

19b,d. Women's Lives in South Asia. Spring 1994. Ms. DICKEY.

(Same as **Asian Studies 19**.)

(For a full description of first-year seminars, see pages 94–100.)

101b. Introduction to Cultural Anthropology. Every spring. Ms. KAPLAN.

An introduction to the concepts, methods, theories, findings, and applications of cultural anthropology. Study of the differences and similarities among the cultures of the world and attempts by anthropologists to explain

them. Among the topics to be covered are anthropological fieldwork, the nature of culture, the relation of language to culture, the relation of the environment to culture, family and kinship, political and economic systems, religion, sex, gender, and ethnocide.

102b,d. Introduction to World Prehistory. Fall 1993. MR. BLITZ.

An introduction to the disciplines of anthropology and archaeology and the studies of human biological and cultural evolution. Among the subjects covered are conflicting theories of human biological evolution, the debates over the genetic and cultural bases of human behavior, the expansion of human populations into various ecosystems throughout the world, the domestication of plants and animals, the shift from nomadic to settled village life, and the rise of complex societies, the state, and civilization.

134b,d. Asian Civilizations. Fall 1995. Ms. DICKEY.

Readings in original texts from India, China, and Japan provide the basis for an exploration of basic patterns of thought and cultural expression in South and East Asia. (Same as **Asian Studies 101.**)

201b. Anthropological Research. Every fall. Ms. DICKEY.

Anthropological research methods and perspectives are examined through classic and recent ethnography, statistics and computer literacy, and the student's own fieldwork experience. Topics covered are ethics, analytical and methodological techniques, the interpretation of data, and the use and misuse of anthropology.

Prerequisite: **Anthropology 101** and sophomore standing or higher.

202b. Essentials of Archaeology. Spring 1994. MR. BLITZ.

Introduces students to the methods and concepts that archaeologists use to explore the human past. Shows how concepts from natural science, history, and anthropology help archaeologists investigate past societies, reveal the form and function of ancient cultural remains, and draw inferences about the nature and causes of change in human societies over time.

Prerequisite: Previous course in anthropology, or **Archaeology 101** or **102**, or permission of the instructor.

203b. Psychological Anthropology. Fall 1993. Ms. DICKEY.

Focuses on four topics in psychological anthropology: culture and personality; definitions and treatment of mental illness in different cultures; cultural influences on emotion; and the application of psychoanalytic analysis to help in understanding the cultural influences on human mental processes.

Prerequisite: Previous course in anthropology or sociology, or permission of the instructor.

207b. Ritual and Myth. Fall 1994. THE DEPARTMENT.

An examination of the place of ritual and myth in the larger social context. A range of religious phenomena from diverse societies is examined, including magic, witchcraft, shamanism, cults, revitalization movements, and civic

religion. Major theoretical approaches to the study of religion are discussed and critiqued, including evolutionism, functionalism, structuralism, psychoanalysis, cultural ecology, and Marxism.

Prerequisite: Previous course in anthropology or sociology, or permission of the instructor.

209b. Politics, Culture, and Society. Fall 1994. THE DEPARTMENT.

The cross-cultural study of politics in groups ranging from nomadic bands to nation-states. Issues examined include, How egalitarian are nonstate political systems? How is social order maintained in societies lacking centralized government? How is warfare waged? How are inequalities of political power within a society legitimized? What is the role of symbolism in political legitimation and in revolution? and What social processes are involved in attracting and mobilizing political support?

Prerequisite: Previous course in anthropology or sociology, or permission of the instructor.

220b,d. Hunters and Gatherers. Spring 1995. MS. KAPLAN.

Traces the origins and challenges the stereotype of hunter-gatherers as small groups of people who are constantly on the move and exhibit the simplest levels of social, political, and economic organization. Topics include hunter-gatherer adaptations to the world's changing environment; strategies of resource procurement; settlement patterns; technological complexity; levels of social, economic, and political integration; and religious life. Compares such groups as the Australian Aborigines, Bushmen, Native Americans, and New Guinea Highlanders.

Prerequisites: At least one previous course in anthropology or sociology, and sophomore standing.

221b. The Rise of the State. Fall 1993. MR. BLITZ.

Scholars have proposed conflicting theories to explain the evolution of state societies and civilizations in the Old and New Worlds. This course reviews the major debates and examines the mechanisms and patterns of state formation, using archaeological and ethnographic examples from Africa, the Americas, and the Pacific Islands.

Prerequisite: At least one previous course in anthropology or sociology.

222b. Culture Through Performance. Fall 1994. MS. DICKEY.

"Cultural performance" covers not only drama, dance, and music, but also such cultural media as ritual, literature, celebration, and spectacle. The anthropological study of these media examines their performers, producers, and audiences in addition to their form and content. Questions fundamental to this study are: What does cultural performance uniquely reveal about a culture to both natives and outsiders? and What social, psychological, and political effects can it have on participants and their societies?

Prerequisite: Previous course in anthropology or sociology, or permission of instructor.

231b,d. Native Peoples and Cultures of Arctic America. Fall 1993.

Ms. KAPLAN.

For thousands of years, Eskimos (Inuit), Indian, and Aleut peoples lived in the arctic regions of North America as hunters, gatherers, and fishermen. Their clothing, shelter, food, and implements were derived from resources recovered from the sea, rivers, and the land. The characteristics of arctic ecosystems are examined. The social, economic, political, and religious lives of various Arctic-dwelling peoples are explored in an effort to understand how people have adapted to harsh northern environments.

Prerequisite: Previous course in anthropology or sociology.

[232b. Peoples of Northernmost Europe.]**235b,d. South Asian Cultures and Societies.** Fall 1994. Ms. DICKEY.

An introduction to the cultures and societies of South Asia, including India, Nepal, Pakistan, Bangladesh, and Sri Lanka. Issues of religion, family and gender, caste, and class are examined through ethnographies, novels, and films, and through in-class simulations of marriage arrangements, religious ritual, and caste ranking. (Same as **Asian Studies 235.**)

Prerequisite: Previous course in anthropology, sociology, or Asian studies.

236b,d. Political Identity and Leadership in South Asia. Spring 1995.

Ms. DICKEY.

In South Asia, political identity is often based on “primordial” ties such as caste, religion, ethnicity, language, and region. Political leadership involves various strategies for addressing and transcending these communal interests. This course examines the development of different political identities and the importance of issues such as personality politics and patronage in electoral leadership in several South Asian countries. (Same as **Asian Studies 236.**)

Prerequisite: Previous course in anthropology, sociology, or Asian studies.

239b,d. Indigenous Peoples of North America. Spring 1994. MR. BLITZ.

An overview and analysis of native North American societies from pre-Columbian times to the present. Topics include the political, economic, family, and religious organization of Native American societies; the impact of European expansion; and the current situation—both on and off reservation—of Native Americans.

Prerequisite: Previous course in anthropology or sociology, or permission of the instructor.

301b. Anthropological Theory. Every spring. Ms. DICKEY.

An examination of the development of various theoretical approaches to the study of culture and society. Anthropology in the United States, Britain, and France is covered from the nineteenth century to the present. Contemporary controversies in anthropological theory are discussed. Among those considered are Morgan, Tylor, Durkheim, Boas, Malinowski, Radcliffe-Brown, Mead, Geertz, and Lévi-Strauss.

Prerequisites: Senior standing as anthropology major or minor, or permission of the instructor.

290b. Intermediate Independent Study in Anthropology. MR. BLITZ, MS. DICKEY, AND MS. KAPLAN.

400b. Advanced Independent Study and Honors in Anthropology. MR. BLITZ, MS. DICKEY, AND MS. KAPLAN.

Theater Arts

Associate Professors

Randolph Stakeman, *Chair*

June A. Vail**, *Director of Dance*

Director of Theater Emeritus

A. Raymond Rutan

Visiting Instructor

Nefertiti Burton

Technical Director

Michael P. Roderick

Visiting Lecturer

Daniel McCusker

Teaching Fellows

Gwyneth Jones

Paul Sarvis

The Department of Theater Arts comprises two divisions: dance and theater. Although no major is offered, students with special interest may, with faculty advice, self-design a major. Students may minor in dance.

DIVISION OF DANCE

The Division of Dance provides a coherent course of study in dance history, theory, and criticism; choreography; and performance studies, including dance technique and repertory. The division's humanistic orientation emphasizes dance's relation to theater and the fine arts, as well as its fundamental connection to the broad liberal arts curriculum. The program's goal is dance literacy and the development of skills important to original work in all fields: keen perception, imaginative problem solving, discipline, and respect for craft.

Requirements for the Minor in Dance

The minor consists of five course credits: **Dance 101, 121, and 141**, and four semesters of dance technique and/or repertory. An independent study, **Dance 291** or **401**, may be substituted for a required course if necessary.

101c. Introduction to Dance. Every other year. Fall 1994. Ms. VAIL.

Considers dance and movement as historical cultural phenomena. Topics include the importance of movement in shaping our perception of the world; the relationship of dance and movement to gender roles, political and social power, religion, and personal and ethnic identity; conceptions of the body as revealed through dance; and anthropological perspectives on one's own experiences with the body, movement, and dance. Direct experience learning dances from various traditions, including Afro-American jitterbug, tradi-

tional Balkan line dances, Hawaiian hula, and contact improvisation, combined with readings, discussion, videos, and live performances. Enrollment limited to 20 students.

121c. Topics in Dance History. Every other year.

American Dance in the Twentieth Century. Spring 1994.

MR. MCCUSKER.

Dance as an American art form since 1900. Focus on choreographers and performers, aesthetics, and the relationship of dance to cultural norms, such as gender roles, and to technological advances, such as film and videotape. This course may be repeated for credit with the contents changed.

141c. Approaches to Choreography: Improvisation and Composition.

Every year. Fall 1993. Ms. VAIL.

Explores ways of creating dances and multimedia performance works, with emphasis on improvisation. Examines various choreographic methods that correspond to compositional practices in writing, drawing, composing, and other art forms, revealing broader applications of creative process. In addition to making three individual or group pieces and a final project, students work with visiting professional performers and attend live performances. Includes reading, writing, discussion, and videos. Enrollment limited to 15 students.

291c. Intermediate Independent Study in Dance. Ms. VAIL.

401c. Advanced Independent Study in Dance. Ms. VAIL.

Performance Studies

The foundation for performance studies classes in dance technique and repertory is modern dance, a term designating a wide spectrum of styles. The program focuses principally on an inventive, unrestricted approach to movement. This offers an appropriate format for exploring the general nature of dance and the creative potential of undergraduates. Courses in ballet and jazz technique are also offered when possible.

Performance studies courses (**171** and **181**) earn one-half credit each semester. Each course may be repeated a maximum of four times for credit. Students may enroll in **Dance 171 and 181** in the same semester, or for two consecutive semesters, for *one full academic course credit*. Attendance at all classes is required. Grading is Credit/Fail.

Instructors for 1993–94: Gwyneth Jones, Daniel McCusker, and Paul Sarvis.

171c. Dance Technique. Every semester. Ms. JONES, MR. MCCUSKER, AND MR. SARVIS.

Classes in modern dance and ballet technique include basic exercises to develop dance skills such as balance and musicality; more challenging

movement combinations and longer dance sequences build on these exercises. In the process of focusing on the craft of dancing, students are also encouraged to develop their own style. During the semester, a historical overview of twentieth-century American dance on video is presented. Attendance at all classes is required.

181c. Repertory and Performance. Every semester. MS. JONES AND MR. SARVIS.

Repertory students are required to take **Dance 171** concurrently, unless exempted by the instructor.

Repertory classes provide the chance to learn faculty-choreographed works or reconstructions of important historical dances. Class meetings are conducted as rehearsals for performances at the end of the semester: the Fall Studio Show and the annual Spring Performance in Pickard Theater, and Museum Pieces at the Walker Art Building in May. Additional rehearsals are scheduled before performances. Attendance at all classes and rehearsals is required. Enrollment limited to 12 students.

DIVISION OF THEATER

The Division of Theater in the Department of Theater Arts offers courses in acting and directing, set design, and, on occasion, in areas of special interest. The theater technician teaches stagelighting.

47c. Playwriting. Fall 1993. MR. RUTAN.

A creative writing course focusing on the one-act play form.

Prerequisite: Consent of the instructor.

70c. Acting and Directing. Spring 1994. MR. RUTAN.

A studio class for students interested in the fundamentals of acting and directing. Enrollment limited to 15 students, with representation of all four classes. Selection by lottery at first meeting.

Prerequisite: Consent of the instructor.

72c. Technical Theater. Every semester. MR. RODERICK.

An introduction to the fundamentals of stagelighting.

Prerequisite: Consent of the instructor. Enrollment limited to 10 students.

271c. Topics in Theater: Scenes from the Black Theater. Fall 1993.

MS. BURTON.

Introduces students to the work of African-American dramatists from 1848 to the present by means of in-class play readings, performance, and discussion. As final projects, students present staged readings of representative scenes with biographical information about the author and background material about the period in which the play was written. (Same as **Africana Studies 271**.)

290c. Intermediate Independent Study in Theater. MR. RUTAN.

400c. Advanced Independent Study in Theater. MR. RUTAN.

Women's Studies

Administered by the Committee on Women's Studies

Sarah F. McMahon, *Program Director*

Joint Appointment with Sociology

Assistant Professor Carol E. Cohn

Women's studies is an interdisciplinary program that incorporates into the curriculum recent research done on women and gender. Courses in women's studies investigate the experiences of women in light of the social construction of gender and its meaning, or symbolic embeddedness, in human cultures, along with its institutionalized function as a division of inequality and dominance. In this way, women's studies explores the realities and meanings of women's lives in many cultures and historical periods.

Requirements for the Major in Women's Studies

The major consists of ten courses, including three required core courses and seven cross-listed women's studies courses, four of which must constitute a focused methodological and thematic concentration.

The core courses, which are designed to illuminate the diverse realities of women's experience while making available some of the main currents of feminist thought, include **Women's Studies 101** and **201**, together with an upper-level capstone course (e.g., an advanced women's studies seminar, a cross-listed disciplinary seminar, an independent study, or an honors project in women's studies).

A student who declares a women's studies major also will design, in consultation with the director, a four-course concentration in which the student uses the methodologies and perspectives of related disciplines to develop a focused expertise in gender analysis. For example, a student might choose a concentration in literature and gender analysis, or in the historical development of gender relations and the cultural representation of gender. In addition, the student will take three other cross-listed women's studies courses that explore methodologies, themes, or questions of gender from perspectives outside the concentration, thus allowing the student to gain multidisciplinary breadth.

Requirements for the Minor

The minor consists of **Women's Studies 101**, normally taken in the first or second year, and four additional courses. To ensure the interdisciplinary nature of the minor, three of these courses must be outside the student's major department, and one must be outside the division of the major.

101. Introduction to Women's Studies. Fall 1993. Ms. COHN.

Provides an interdisciplinary overview of approaches and topics central to the study of women and gender. Through historical, literary, and sociological

analyses, a series of cross-cultural themes is examined, including cultural representations of women and of gender, identity and role issues, health and reproduction, work, feminism, and other gender-related concerns.

201. Feminist Theory and Methodology. Spring 1994. Ms. COHN.

Provides an overview of recent developments in the new scholarship on women, and offers a historical, cross-disciplinary review of theories of gender and of the relationships between gender and power. An interdisciplinary approach is used to compare and contrast analyses from diverse perspectives such as liberal feminism, radical feminism, post-structuralism, and Marxist feminism.

Prerequisite: **Women's Studies 101** or permission of the instructor.

[**242. Sexuality and Reproduction.**]

300. Advanced Seminar. Fall 1993. Ms. COHN.

Examines current social and political issues using the perspectives and methods of women's studies and the analytic frameworks of feminist theory. Emphasis is on both applying and extending theory in analyzing complex societal problems.

Prerequisites: Three courses in women's studies, including **101** and **201**, or permission of the instructor. Enrollment limited to 15 students. Preference is given to senior women's studies majors or minors.

390. In Search of the Common Good—A Critical Look at Feminism, Multiculturalism, and Ecology. Spring 1994. MR. RENSENBRINK.

An interdisciplinary seminar for students with a focus in Africana studies, environmental studies, and/or women's studies. First discusses the concept of the common good, with emphasis on the nature and feasibility of democracy under modern conditions. Then examines concepts of feminism, multiculturalism, and ecology as they evolve in social movements of the late twentieth century. Readings include works of intellectuals and activists within each movement. A final section attempts to put in critical perspective the relation between these movements and the common good. (Same as **Africana Studies 390** and **Environmental Studies 390**.)

Prerequisites: Two or more lower-level courses in one or more of the three interdisciplinary programs, or permission of the instructor. Enrollment limited to 15 students. Preference given to seniors.

290. Intermediate Independent Study.

400. Advanced Independent Study and Honors.

CROSS LISTINGS

(For full course descriptions and prerequisites, see the appropriate department listings.)

Anthropology

19b,d. Women's Lives in South Asia. Spring 1994. Ms. DICKEY.
(Same as **Asian Studies 19.**)

Classics

[221c. Women in the Life and Literature of Classical Antiquity.]
223c. Family and Society in Ancient Rome. Spring 1994. Ms. BOYD.

Economics

211b. Women in the Labor Market. Fall 1993. MR. SANTOS.
Prerequisite: **Economics 101.**

217b. Economics of Population. Spring 1994. Ms. DEGRAFF.
Prerequisite: **Economics 101.**

301b. The Economics of the Family. Spring 1994. Ms. CONNELLY.
Prerequisites: **Economics 255** and **257**, or permission of the instructor.

Education

101c. Education in the Twentieth Century. Every other year. Fall 1994.
Ms. MARTIN.

English

11c. Unspeakable Sexualities. Fall 1993. MR. COLLINGS.

13c. Gender, Class, and Comedy in American Film, 1933–1983.
Fall 1993. MR. LITVAK.

22c. Twentieth-Century Autobiographical Writing. Spring 1994.
Ms. GOODRIDGE.

251c. The Romantic Novel. Every other year. Fall 1993. MR. COLLINGS.

252c. The Victorian Novel. Every other year. Spring 1994. MR. LITVAK.

261c. Twentieth-Century British Fiction. Spring 1994. Ms. REIZBAUM.

[271c. American Literature, 1860–1917.]

275c,d. African-American Fiction by Women: History and Ideology.
Spring 1994. Ms. MUTHER.

276c,d. African-American Poetry: The Harlem Renaissance. Fall 1993.
Ms. MUTHER.

280c. Women Writers in English. Every other year. Fall 1993. Ms. DIEHL.

[281c. Narrative.]

282c. An Introduction to Literary Theory Through Popular Culture.
Every other year. Fall 1994. MR. LITVAK.

300c. Honors Seminar: Literary Theory. Fall 1993. MR. LITVAK.

History

11c. Women in Britain and America: 1750–1920. Spring 1994.
MS. McMAHON.

20c. In Sickness and in Health: Public Health in Europe and America.
Fall 1995. MS. TANANBAUM.

246c. Women in American History, 1600–1900. Spring 1995.
MS. McMAHON.

[247c. American Women in the Twentieth Century.]

248c. Family and Community in American History. Fall 1995.
MS. McMAHON.

[249c. America's Working Women.]

[264c,d. Muslim Africa.]

[321c. The Victorian Age.]

322c. Race, Gender, and Ethnicity in British Society. Spring 1995.
MS. TANANBAUM.

331c. A History of Women's Voices in America. Fall 1993. MS. McMAHON.
Prerequisite: **History 246** or **248**, or permission of the instructor.

Philosophy

238c. Feminism and Liberalism. Spring 1994. MR. SEHON.

Psychobiology

50a. Mind and Brain: Historical and Contemporary Issues.
Every other year. Fall 1993. MR. ROSE.

Psychology

209b. Psychology of Women. Spring 1994. MS. BURGGRAF.

Religion

253c. Religion, Women, and Nature. Fall 1993. MS. MAKARUSHKA.

Romance Languages

319c. French Women Writers. Spring 1994. MS. DILLMAN.
Prerequisite: **French 209** or permission of the instructor.

Russian

222c. Topics Course: Women in Russian Society and Culture.
Every other fall. Fall 1994. MS. KNOX-VOINA.

Sociology

204b. Families: A Comparative Perspective. Spring 1994. MS. RILEY.
Prerequisite: **Sociology 101** or **Anthropology 101**.

219b. Sociology of Gender. Fall 1993. Ms. RILEY.

Prerequisite: **Sociology 101** or **Anthropology 101** or permission of the instructor.

251b. Sociology of Health and Illness. Spring 1994. Ms. BELL.

Prerequisite: **Sociology 101** or **Anthropology 101** or permission of the instructor.

252b. Sociology of Illness and Disability. Fall 1994. Ms. BELL.

Prerequisite: **Sociology 101** or **Anthropology 101** or permission of the instructor.

Theater Arts: Division of Dance

101c. Introduction to Dance. Fall 1994. Ms. VAIL.

Educational Resources and Facilities

HAWTHORNE-LONGFELLOW LIBRARY

The strength of a college library rests in its collections of books and other library materials and in the ability of its staff to make the library useful to students and faculty. Bowdoin's Nathaniel Hawthorne-Henry Wadsworth Longfellow Library is exceptionally strong. Totalling more than 800,000 volumes, its collections have been built up over a period of nearly 200 years and include an unusually large proportion of distinguished and valuable volumes. Similarly distinguished has been the roster of librarians of the College, a list that includes John Abbot, Calvin Stowe, Henry Wadsworth Longfellow, George T. Little, and Richard Barksdale Harwell.

The first books that belonged to the library—a set of the Count Marsigli's *Danubius Pannonica-Mysicus*, given to the College in 1796 by General Henry Knox (who had been a bookseller in Boston before he achieved fame as George Washington's chief ordnance officer)—are still a part of its collections. In the early decades of the nineteenth century, Bowdoin's library, largely because of extensive gifts of books from the Bowdoin family and the Benjamin Vaughan family of Hallowell, Maine, was one of the largest in the nation. The Bowdoin library has been maintained as one of the larger college libraries of the country, but its areas of growth are now defined by the curriculum of the College and restrained by the desirability of containing it as a collection to which students can have easy, and almost complete, access. In addition to its 801,000 volumes (a count that includes bound periodicals and newspapers), the library has a collection of approximately 60,000 maps, over 2,000 photographs, and more than 500,000 manuscript items. The current annual rate of acquisition is about 17,000 volumes, and the annual expenditure per student is more than \$1,622.

The majority of the collection is housed in Hawthorne-Longfellow Library. Material related to the sciences and mathematics was moved into the new Hatch Science Library in 1991. In addition, smaller, more specialized collections can be found in the art and music departments, and in the Language Media Center in Sills Hall. An on-line catalog, available through terminals in all the library buildings and elsewhere on campus by way of the College's computer network, provides readers with access to books and journals. Materials lent from the library are recorded on the automated circulation system, which provides users with up-to-date information on the circulation status of each volume. In addition, the on-line catalog gives users access to the catalog holdings of Colby and Bates Colleges' libraries and those of the campuses of the University of Maine.

The Hawthorne-Longfellow Library building was opened in the fall of 1965. The library occupies 60,000 square feet of floor space and will

eventually incorporate the 26,000 square feet presently used for the College's administrative offices. The library has seating for more than 565 readers, 500 of whom can be accommodated at individual study tables and carrels, and shelving to house all of its collections (with the exception of the rare materials in the Special Collections Suite) on open stacks. Study stations are dispersed throughout the building.

The entrance level of the building contains the portions of the library of most immediate use to its users: the circulation desk, both the card catalog and the computer catalog, the reference desk, reference books and bibliographies, current newspapers, current periodicals, periodical indexes, and two reading areas. The lower level of the library houses Bowdoin's extensive collection of bound periodicals, its collections of microfilm and other microforms, government documents, and the reserved reading shelves.

Special features of the second floor are an exhibit area and the President Franklin Pierce Reading Room, informally furnished and giving a broad view through floor-to-ceiling windows. The eastern end of the third floor is the Special Collections suite. This includes shelf space in a climate-controlled area for Bowdoin's rare books and manuscripts, and a reading room for their use.

Study space, both formal and informal, is available on all three floors of the library and in the Hubbard Hall stack area. Terminals for on-line catalog access are conveniently located throughout the building.

The Hatch Science Library, opened in the spring of 1991, houses the College's science-related materials, including periodicals, microforms, maps, government documents, and indexes. The staff offers the full range of reference services to faculty and students. The building can accommodate more than 160 readers at individual carrels, study tables, and informal seating areas. Two seminar rooms, six faculty studies, and staff work areas are also provided.

The collections of the library are strong (though inevitably of varying strength) in all areas covered by the curriculum of the College, and a constant effort is maintained to ensure that representative publications in fields outside the current curriculum are added to the library. There is special strength in documentary publications relating to both British and American history, in the books relating to exploration and the arctic regions, in books by and about Carlyle, in books and pamphlets about Maine, in materials about the Huguenots, in books and pamphlets on World War I and on the history of much of middle Europe in this century, and in the literary history of pre-twentieth-century France.

The reference collection includes most of the English-language encyclopedias and a good representation in original editions of major foreign encyclopedias—from two editions of the monumental eighteenth-century *Encyclopédie* of Diderot to such modern works as the *Grand Larousse Encyclopédique*, *Der Grosse Brockhaus*, the *Enciclopedia Universal Illustrada Europeo-Americana*, the *Bol'shaya Sovetskaya Entsiklopedia*, and the *Enciclopedia Italiana de Scienze, Lettere ed Arti*. In it also are the principal

national bibliographies and other major bibliographical tools. Dispersed in their proper places throughout the collections are such distinguished sets as the *Studies and Documents* of the American Institute of Musicology in Rome, Armando Cortesaëo's *Portugaliae Monumenta Cartographia*, the elephant-foлио edition of John James Audubon's *Ornithological Biography* (his "Birds of America"), E. S. Curtis's *The North American Indian*, the *Rerum Britannicarum Medii Aevi Scriptores*, Jacques Paul Migne's *Patrologiae* (Latina), the *Scriptores Rerum Germanicum*, Reuben Gold Thwaites's *Early American Travels*, and *The Victoria History of the Counties of England*. Scholarly sets include the publications of the Camden Society, the Early English Text Society, the Egypt Exploration Society, the Geological Society of America, the Hakluyt Society, the Henry Bradshaw Society, the Huguenot Society of London, the Prince Society, the Royal Historical Society, the Royal Society, the Scottish History Society, the Scottish Text Society, and the Société des Anciens Textes Français. Of comparable, or perhaps even greater, distinction is Bowdoin's collection of more than 100,000 bound volumes of periodical publications.

Special collections in the Hawthorne-Longfellow Library include extensive collections of books, manuscripts, and other materials by and about both Hawthorne and Longfellow; books and pamphlets collected by Governor James Bowdoin; the private library of James Bowdoin III; an unusually large collection of late-eighteenth- and early-nineteenth-century books (particularly in the sciences) collected by Maine's distinguished Vaughan family; books, periodicals, and pamphlets contemporaneous to the French Revolution; the books, papers, and memorabilia of the Abbott family; an unusually fine representation of the items published in the District of Maine and in the state during the first decade of its statehood; and the books printed by the three most distinguished presses in Maine's history: the Mosher Press, the Southworth Press, and the Anthoensen Press.

Also in the Special Collections suite are the printed items relating to the history of the College and the chief collections of manuscript archives of the College. These include much material on Bowdoin alumni and extend far beyond a narrow definition of official college records. Here also is the library's general collection of manuscripts. Outstanding among the manuscripts are the collections of the papers of Generals O. O. Howard and Charles Howard, of Senator William Pitt Fessenden, and of Professors Parker Cleaveland, Alpheus S. Packard, Henry Johnson, and Stanley Perkins Chase; collections of varying extent of most of Bowdoin's presidents, especially Jesse Appleton, Joshua L. Chamberlain, William DeWitt Hyde, and Kenneth Charles Morton Sills; manuscripts by Kenneth Roberts, Robert Peter Tristram Coffin, Kate Douglas Wiggin, Charles Stephens, Edwin Arlington Robinson, Elijah Kellogg, and such contemporary authors as Vance Bourjaily, John Pullen, and Francis Russell.

The books and manuscripts in Bowdoin's special collections are not treated simply as museum pieces. They are open to use by scholars and serve

an important function in introducing undergraduates—in their research projects and other independent work—to the variety of materials they can expect to work with if they go on to graduate work.

Special collections include also the Bliss collection of books on travel, on French and British architecture, and other fine books (miscellaneous in nature but largely relating to the history of art and architecture) that are housed in the Susan Dwight Bliss Room in Hubbard Hall. These books are additionally distinguished by their fine bindings. The books in this room and the room itself (with its Renaissance ceiling that once graced a Neapolitan palazzo) were the gift of Miss Bliss in 1945.

In addition to its strong and diverse collections, the library provides several services designed to extend access to resources not held locally. Through a vigorous interlibrary loan program, the library assures the timely delivery of materials from the collections of Colby and Bates Colleges' libraries, and other libraries throughout the country and the world, to its users. Reference librarians search remote on-line indexes and full-text database services for responses to faculty and student queries not easily answered through the use of the library's own collections.

During term time, the library is open from 8:30 A.M. to midnight, Monday through Saturday, and on Sunday from 10:00 A.M. to midnight. When the College is not in session, the library is open from 8:30 A.M. to 5:00 P.M., Monday through Friday. Small departmental collections in art and music are housed contiguous to the offices of the departments and are available for use on separate schedules of opening.

The operations of the library and the growth of its collections are supported by the general funds of the College and by gifts from alumni and other friends of the library and the College. The library is annually the recipient of generous gifts of both books and funds for the immediate purchase of books or other library materials. It is always especially desirous of gifts of books, manuscripts, and family records and correspondence relating to the alumni of the College. The income of more than a hundred gifts to the College as endowment is directed to the use of the library.

LANGUAGE MEDIA CENTER

The Language Media Center, located in the basement of Sills Hall, supports the study of foreign languages by providing a fourteen-station Tandberg audio-active language laboratory; fifteen individual viewing stations for VHS, Beta, and 3/4-inch videocassettes (European and American standards); a shortwave receiving station; and four Macintosh microcomputer stations.

The center offers a group viewing area that accommodates up to thirty-five persons and a lobby area for informal viewing of live television transmitted from five satellite dishes located on the roofs of Morrell Gymnasium and Sills Hall. Students are able to watch live international television from these systems.

In addition, the Language Media Center provides an array of audio and video services, such as the high-speed duplication of audio tapes and the duplication of video tapes, cataloging and storage of audiovisual materials, and display of popular foreign-language newspapers and periodicals.

BOWDOIN COLLEGE MUSEUM OF ART

An art collection has existed at Bowdoin almost since the founding of the College. It came into existence through the 1811 bequest of James Bowdoin III and was one of the earliest to be formed in the United States. Bowdoin's gift consisted of two portfolios containing 141 old master drawings, among which was a superb landscape attributed to Pieter Bruegel the Elder, and 70 paintings. A group of Bowdoin family portraits was bequeathed in 1826 by James Bowdoin III's widow, Sarah Bowdoin Dearborn. Through the years, the collection has been expanded through the generosity of alumni, College friends, and members of the Bowdoin family, and now numbers 12,000 art objects.

Although various parts of the College's art collection were on view during the first half of the nineteenth century, it was not until 1855 that a special gallery devoted to the collection came into being in the College Chapel. This gallery was made possible by a gift from Theophilus Wheeler Walker of Boston, a cousin of President Leonard Woods. It was as a memorial to Walker that his two nieces, Harriet Sarah and Mary Sophia Walker, donated funds in 1891 for the present museum building, designed by Charles Follen McKim of McKim, Mead & White. Four murals of Athens, Rome, Florence, and Venice by John La Farge, Elihu Vedder, Abbott Thayer, and Kenyon Cox, respectively, were commissioned to decorate the museum's rotunda.

The museum holds an important collection of American colonial and federal portraits, including works by Smibert, Feke, Blackburn, Copley, Stuart, Trumbull, and Sully. Among the five examples by Robert Feke is the full-length likeness of Brigadier General Samuel Waldo, generally regarded as the finest American portrait of the first half of the eighteenth century. The nine paintings by Gilbert Stuart include pendant portraits of Thomas Jefferson and James Madison. *Colonial and Federal Portraits at Bowdoin College*, published in 1966, describes this collection in detail.

The College's collection of ancient art contains sculpture, vases, terra cottas, bronzes, gems, coins, and glass of all phases of the ancient world. The most notable benefactor in this area was Edward Perry Warren, L.H.D. '26, the leading American collector of classical antiquities of the first quarter of the twentieth century. Five magnificent ninth-century B.C. Assyrian reliefs from the Palace of Ashurnazirpal II, an acquisition facilitated for the College by Henri Byron Haskell M1855, are installed in the museum's rotunda. *Ancient Art in Bowdoin College*, published in 1964, describes these holdings.

The College has been the recipient of a Samuel H. Kress Study Collection of twelve Renaissance paintings; a large collection of medals and plaquettes presented by Amanda Marchesa Molinari; a fine group of European and

American pictures and decorative arts given by John H. Halford '07 and Mrs. Halford; a collection of Chinese and Korean ceramics given by Governor William Tudor Gardiner, LL.D. '45, and Mrs. Gardiner; and a collection of nineteen paintings and 168 prints by John Sloan bequeathed by George Otis Hamlin.

The College's Winslow Homer Collection comprises paintings, drawings, prints, and memorabilia pertaining to the artist's career. The first painting by Homer to enter the museum, a watercolor entitled *The End of the Hunt*, was contributed by the Walker sisters from their personal collection. In the fall of 1964, a gift from the Homer family brought to Bowdoin the major portion of the memorabilia remaining in the artist's studio at Prout's Neck, letters written over a period of many years to members of his family, and photographs of friends, family, and Prout's Neck. A large collection of woodcuts was later purchased to augment these holdings and to create a center for the scholarly study of the life and career of this important American artist.

In the late 1960s and early 1970s, the museum acquired through gift and purchase a survey collection of paintings, drawings, and prints by the American artist and illustrator Rockwell Kent.

The permanent collections also contain fine examples of the work of such nineteenth-century and twentieth-century American artists as Martin Johnson Heade, Eastman Johnson, George Inness, Thomas Eakins, John Singer Sargent, William Glackens, Marsden Hartley, Jack Tworkov, Arshile Gorky, Franz Kline, Andrew Wyeth, D.F.A. '70, Leonard Baskin, and Alex Katz.

In 1982, the museum published the *Handbook of the Collections*, dedicated to the memory of John H. Halford '07. In 1985, a comprehensive catalogue of the College's permanent collection of old master drawings was published. *The Architecture of Bowdoin College*, an illustrated guide to the campus by Patricia McGraw Anderson, was published in 1988.

In addition to exhibitions of the permanent collections, the museum schedules an active program of temporary exhibitions of art lent by institutions and private collectors throughout the United States. Recent exhibitions include *From Dürer to Picasso: Five Centuries of Master Prints from a Private Collection*; *Katherine Porter: Paintings/Drawings*; *The Here and the Hereafter: Images of Paradise in Islamic Art*; *From Studio to Studiolo: Florentine Draftsmanship under the First Medici Grand Dukes*; *Holocaust: The Presence of the Past*; and *Vinalhaven at Bowdoin: One Press, Multiple Impressions*.

The College lends art objects in the custody of the museum to other institutions throughout the United States and, occasionally, to institutions abroad. The museum also sponsors educational programs including gallery talks and lectures that relate to the permanent collections and complement temporary exhibitions.

In 1985, the Associates Program merged with other special campus support groups to become the Association of Bowdoin Friends. Its participants have access to a wide variety of activities and programs sponsored by the

museum. Another vital support group of sixty-eight volunteers conducts tours and assists the museum staff with clerical activities and educational programs.

The amount of space in the Walker Art Building more than doubled in 1976 following extensive renovation designed by Edward Larrabee Barnes. Two galleries for exhibiting the museum's permanent collection and two temporary exhibition galleries were added on the lower level. One of the new galleries was dedicated to the memory of John H. Halford '07; another, in memory of John A. and Helen P. Becker.

THE PEARY-MACMILLAN ARCTIC MUSEUM AND ARCTIC STUDIES CENTER

The Peary-MacMillan Arctic Museum was founded in honor of two famous arctic explorers and Bowdoin alumni, Admirals Robert E. Peary (Class of 1877) and Donald B. MacMillan (Class of 1898). On April 6, 1909, after a lifetime of arctic exploration, Peary became the first person to reach the North Pole. MacMillan was a crew member on that North Pole expedition. Between 1908 and 1954, MacMillan explored Labrador, Baffin Island, Ellesmere Island, and Greenland. Most of his expeditions were made on board the *Bowdoin*, a schooner he designed for work in ice-laden northern waters. MacMillan took college students on the expeditions and introduced them to the natural history and anthropology of the North. He was not the first to involve Bowdoin students in arctic exploration, however. In 1860, Paul A. Chadbourne, a professor of chemistry and natural history, had sailed along the Labrador and West Greenland coasts with students from Williams and Bowdoin.

The museum's collections include equipment, paintings, and photographs relating to the history of arctic exploration, natural history specimens, and artifacts and drawings made by Inuit and Indians of arctic North America. The museum has large collections of ethnographic photographs and films recording past lifeways of Native Americans taken on the expeditions of MacMillan and Robert Bartlett, an explorer and captain who sailed northern waters for nearly fifty years. Diaries, logs, and correspondence relating to the museum's collections are housed in the Special Collections section of the Hawthorne-Longfellow Library.

The museum, established in 1967, is located on the first floor of Hubbard Hall. The building was named for General Thomas Hubbard of the Class of 1857, a generous benefactor of the College and financial supporter of Peary's arctic ventures. The museum's exhibitions were designed by Ian M. White, former director of the Fine Arts Museum of San Francisco, who sailed with MacMillan in 1950. Generous donations from members of the Class of 1925, together with gifts from George B. Knox of the Class of 1929, a former trustee, and other interested alumni and friends, made the museum a reality. Continued support from friends of the College, the Kane Lodge, and the

Russell and Janet Doubleday Foundation have allowed the museum to continue to grow.

The Arctic Studies Center was established in 1985 as a result of a generous matching grant from the Russell and Janet Doubleday Foundation to endow the directorship of the center, in recognition of the Doubledays' close relationship to MacMillan. The center links the resources of the museum and library with teaching and research efforts, and hosts traveling exhibitions, lectures, workshops, and educational outreach projects. Through course offerings, field research programs, employment opportunities, and special events, the center promotes anthropological, archaeological, geological, and environmental investigations of the North.

ACADEMIC COMPUTING SERVICES

Academic Computing Services (ACS), a department of the Computing Center, manages Bowdoin's public computing laboratories, provides hardware and software services for faculty instructional and research activities, administers the College's discount purchase plans for computers, manages the one time-sharing system that is dedicated to academic work, provides network connections between Bowdoin and other institutions, and manages a hotline for questions and problems about computers.

ACS operates seven widely accessible labs for students, faculty, and staff. The main lab is in Hubbard 208. Apple Macintosh, IBM, and compatible microcomputers (all with hard disks), video terminals, and laser printers are available in the lab. "Bowdoin College Computing Services Overview and Introduction," available through ACS, contains detailed descriptions and policies.

Unlike other institutions that limit their users to one kind of computing system, ACS at Bowdoin believes the educational benefits of using different systems are well worth their added cost. Therefore, for students, faculty, and staff, ACS supports both Macintosh and IBM-compatible microcomputing as well as Digital UNIX time-sharing. While individuals are free to work most of the time with the system they prefer, a particular course may require work on one specific system.

Students, faculty, and staff may purchase Apple Macintosh, IBM, and software products at a discount. College policy does not require students to own personal computers, although many do so. Students are encouraged to wait until the beginning or middle of the second year before purchasing a personal system. At that point, personal work-styles and departmental interests are more focused, and waiting ensures having a suitable system for the challenges of third-year and fourth-year work. In turn, ACS maintains adequate public facilities for all students who do not have their own systems.

The ACS time-sharing computer is a DEC System 5000 Model 200 with Ultrix (UNIX). Accounts are available to all students, faculty, and staff at no charge and offer a full range of electronic mail, editing, and other applications. Members of the College community can also use the On-Line Library

Catalog System for the Bowdoin College libraries, and through it can search the libraries of Bates College, Colby College, and the University of Maine library system. (Dedicated terminals in the libraries also provide catalog access.)

Bowdoin has subscribed to the New England Academic and Research Network (NEARnet) to provide all members of the Bowdoin community the full range of international network services. The College's internet node name is BOWDOIN.EDU.

ACS student consultants monitor the campus computing help-desk (available by telephone, ext. 3792), through which the campus community is encouraged to raise questions. The main offices of Academic Computing Services are located in Hubbard 208.

RESEARCH AND CONFERENCE FACILITIES

Bethel Point Marine Research Station

The College's marine research facility is located approximately 10 miles from the campus on a 17-acre parcel of land with considerable shore frontage. Two laboratories are situated on the land. All major coastal environments of Maine are represented in microcosm, offering a unique opportunity for study. In conjunction with the hydrocarbon research performed by Bowdoin's Department of Chemistry, the staff of the Bethel Point facility studies the chemical and biological consequences of oil spills on marine environments. While much of this study has been performed at the station and other points on the Maine coast, Bowdoin research teams have investigated spills in France, Puerto Rico, and various locations along the eastern seaboard of the United States.

Bowdoin Scientific Station

The College maintains a field station at Kent Island, off Grand Manan, in the Bay of Fundy, New Brunswick, Canada, where qualified students can conduct fieldwork on biological problems. Kent Island, containing about 200 acres and several buildings, was presented to the College in 1935 by John Sterling Rockefeller.

Kent Island is a major seabird breeding ground and the home of various land birds. Its location makes it a concentration point for migrating birds in spring and fall. The famous Fundy tides create excellent opportunities for the study of marine biology. The terrestrial habitats are surprisingly varied for an island of this size.

No formal courses are offered at the station, but students from Bowdoin and other institutions are encouraged to select problems for investigation at Kent Island during the summer and to conduct fieldwork on their own initiative with the advice and assistance of the Department of Biology. Approved work at the station is acceptable for credit as independent study. Field trips of short duration to Kent Island are a feature of Bowdoin's courses in ecology and ornithology.

Faculty members and graduate students from numerous universities and colleges conduct research in biology at the Bowdoin Scientific Station. They help the undergraduate members of the station through informal instruction and as examples of experienced investigators at work.

Financial assistance for students conducting research at Kent Island is available from the Alfred O. Gross Fund (see page 263). Other funds that support the Bowdoin Scientific Station are the Kent Island Fund, the Heizaburo Saito Fund, the Minot Fund, and the Roy Spear Memorial Fund.

Breckinridge Public Affairs Center

The Breckinridge Public Affairs Center is a 23-acre estate on the tidal York River in southern Maine. The center includes a 25-room main house, a clay tennis court, and a 110-foot, circular, saltwater swimming pool. Owned and operated by Bowdoin College, the center is used for classes, seminars, and meetings of educational, cultural, and civic groups. Business and professional organizations also use the facility for planning sessions and staff development activities. River House, which accommodates 19 overnight guests, was designed by Guy Lowell in 1905 and is on the National Register of Historic Places. The estate was given to Bowdoin in 1974 by Marvin Breckinridge Patterson, whose husband was the Honorable Jefferson Patterson of St. Leonard, Maryland. Named in honor of Mrs. Patterson's family, who built the house, the estate is available for use April 1 through July 25, and September 17 through Thanksgiving, each year.

Coleman Farm Banding Station

During the course of the academic year, students conduct field study in ornithology at a site three miles south of the campus, using a tract of College-owned land that extends to the sea. Numerous habitats of resident birds are found on the property, and it is a stopover point for many migratory species. Organized by students in 1975, the Coleman Farm Banding Station is equipped by the College and a generous neighbor, E. Christopher Livesay, and operates under the direction of the Department of Biology.

Maine Public Broadcasting Corporation

The new Maine Public Broadcasting Corporation is the result of the merger of WCBB-TV, an organization that was founded and originally financed by Bowdoin College in collaboration with Bates and Colby Colleges, and the Maine Public Broadcasting Network, a group of radio and television stations created by the University of Maine system. The new organization coordinates and broadcasts public television and radio signals statewide, and is supported largely through the contributions of individuals, businesses, and state and federal grants. The mission of public broadcasting is to enhance educational opportunities for viewers and listeners throughout Maine. The president of Bowdoin College serves on the Board of Trustees.

LECTURESHIPS

The regular instruction of the College is supplemented each year by ten or twelve major lectures, in addition to lectures, panel discussions, and other presentations sponsored by the various departments of study and undergraduate organizations.

John Warren Achorn Lectureship (1928): The income of a fund established by Mrs. John Warren Achorn as a memorial to her husband, a member of the Class of 1879, is used for lectures on birds and bird life.

Charles F. Adams Lectureship (1978): The income of a fund established by the bequest of Charles F. Adams '12 is used to support a lectureship in political science and education.

Tom Cassidy Lectureship (1991): The income of a fund established by the bequest of Thomas J. Cassidy '72 is used to support a lectureship in journalism.

Dan E. Christie Mathematics Lecture Fund (1976): Established by family, friends, colleagues, and former students in memory of Dan E. Christie '37, a member of the faculty for thirty-three years and Wing Professor of Mathematics from 1965 until his death in 1975, this fund is used to sponsor lectures under the auspices of the Department of Mathematics.

Annie Talbot Cole Lectureship (1907): This fund, established by Mrs. Calista S. Mayhew in memory of her niece, Mrs. Samuel Valentine Cole, is used to sponsor a lectureship that contributes "to the ennoblement and enrichment of life by standing for the idea that life is a glad opportunity. It shall, therefore, exhibit and endeavor to make attractive the highest ideals of character and conduct, and also, insofar as possible, foster an appreciation of the beautiful as revealed through nature, poetry, music, and the fine arts."

John C. Donovan Lecture Fund (1990): Established by colleagues, friends, and members of the Donovan family, through the leadership of Shepard Lee '47, this fund is used to support a lecture in the field of political science under the sponsorship of the Department of Government.

Elliott Oceanographic Fund (1973): Established by the Edward Elliott Foundation and members of the Elliott family in memory of Edward L. Elliott, a practicing geologist and mining engineer who expressed a lifelong interest in science and the sea, this fund promotes oceanographic education, in its widest definition, for Bowdoin students. It is expected that at least part of the fund will be used to support the Elliott Lectures in Oceanography, which were inaugurated in 1971.

Alfred E. Golz Lecture Fund (1986): Established by Ronald A. Golz '56 in memory of his father, this fund is used to support a lecture by an eminent historian or humanitarian to be scheduled close to the November 21 birthday of Alfred E. Golz.

Cecil T. and Marion C. Holmes Mathematics Lecture Fund (1977): Established by friends, colleagues, and former students to honor Cecil T. Holmes, a member of the faculty for thirty-nine years and Wing Professor of Mathematics, this fund is used to provide lectures under the sponsorship of the Department of Mathematics.

Lesbian and Gay Lectureship Fund (1992): Established by members of the Bowdoin Gay and Lesbian Alumni/ae Association, this fund is used to sponsor at least one lecture annually in the field of gay and lesbian studies.

Mayhew Lecture Fund (1923): Established by Mrs. Calista S. Mayhew, this fund is used to provide lectures on bird life and its effect on forestry.

Charles Weston Pickard Lecture Fund (1961): The income of a fund established by John Coleman '22 in memory of his grandfather, a member of the Class of 1857, is used to provide a lecture in the field of journalism in its broadest sense. "By journalism is meant lines of communication with the public, whether through newspapers, radio, television, or other recognized media."

Kenneth V. Santagata Memorial Lecture Fund (1982): Established by family and friends of Kenneth V. Santagata '73, this fund is used to provide at least one lecture each term, rotating in the arts, humanities, and social sciences, with lecturers to be recognized authorities in their respective fields, to present new, novel, or nonconventional approaches to the designated topic in the specified category.

Edith Lansing Koon Sills Lecture Fund (1962): This fund was established by the Society of Bowdoin Women to honor Mrs. Kenneth C. M. Sills, the wife of a former president of Bowdoin College.

The Harry Spindel Memorial Lectureship (1977): Established by the gift of Rosalyne Spindel Bernstein and Sumner Thurman Bernstein in memory of her father, Harry Spindel, as a lasting testimony to his lifelong devotion to Jewish learning, this fund is used to support annual lectures in Judaic studies or contemporary Jewish affairs.

The Jasper Jacob Stahl Lectureship in the Humanities (1970): Established by the bequest of Jasper Jacob Stahl '09, Litt.D. '60, this fund is used "to support a series of lectures to be delivered annually at the College by some distinguished scholarly and gifted interpreter of the Art, Life, Letters, Philosophy, or Culture, in the broadest sense, of the Ancient Hebraic World, or of the Ancient Greek World or of the Roman World, or of the Renaissance in Italy and Europe, or of the Age of Elizabeth I in England, or that of Louis XIV and the Enlightenment in France, or of the era of Goethe in Germany."

Tallman Lecture Fund (1928): Established by Frank G. Tallman, A.M. H'35, as a memorial to the Bowdoin members of his family, this fund is used to support a series of lectures to be delivered by men selected by the faculty. In addition to offering a course for undergraduates, the visiting professor on

the Tallman Foundation gives public lectures on the subject of special interest.

PERFORMING ARTS

Drama

The Division of Theater within the Department of Theater Arts is staffed by the director of theater and the technical director. The main thrust of its activities is in making possible extensive extracurricular participation in the theater. The student drama group, Masque and Gown, was founded in 1903.

Credit courses in acting, directing, and playwriting are taught by the director of theater. Lighting is taught by the technical director. Each year at least three major productions are produced by Masque and Gown on the stage of Pickard Theater. For many years, one production each season has been a musical. March 1993 saw a production of *Joseph and the Amazing Technicolor Dream Coat*. Wendy Wasserstein's *Uncommon Women and Others*, directed by Michele Cobb '93, was presented on Parents' Weekend. One very popular production each year is usually a Shakespeare drama or classical play. Molière's *Misanthrope* was performed in November 1992. There are about eleven different productions during the school year.

Pickard Theater, the generous gift in 1955 of Frederick William Pickard, LL.D., of the Class of 1894, includes a modern, 600-seat theater with proscenium stage equipped with a hemp and counterweight system for flying scenery and an electronic lighting control system. In addition, Memorial Hall contains a scene shop and, on the lower floor, the G.H.Q. Playwrights' Theater, a 100-seat, open-stage theater for experimental work by students.

Membership in Masque and Gown results from major work on one, or minor work on two, of the plays produced each season. An executive committee of undergraduates elected by the members consults with the director of theater to determine the program for each year, handles publicity of the club, and organizes the production work. Masque and Gown needs box-office workers, publicists, directors, designers, builders, painters, electricians, stage hands, and costumers, as well as actors, actresses, and playwrights.

One of the most important activities of the club has been its encouragement of playwriting. For close to sixty years, Masque and Gown has sponsored an annual student-written one-act play contest, with cash prizes. The contest is now underwritten by the generous gift of Hunter S. Frost '47.

Dance

The Division of Dance in the Department of Theater Arts evolved from the Bowdoin Dance Program, which began in 1971. Each year, the Bowdoin Dance Group, the student performing ensemble, presents an informal studio show in December and a major performance of student and faculty works in Pickard Theater in April. Students also perform at Parents' Weekend in the fall and in the Museum of Art in May. Performances are strongly linked to

participation in technique, repertory, and choreography classes, held in the dance studio at Sargent Gymnasium, but independent work is also presented.

A co-curricular, student-run performance group called VAGUE (an acronym for “Very Ambitious Group Under Experiment”) performs as part of Bowdoin Dance Group concerts and in other shows on campus and off. VAGUE’s faculty advisor is the director of dance, and the group shares the Division of Dance’s costume collection and rehearsal space in the dance studio on the third floor of Sargent Gymnasium.

The studio provides a light and airy space with a suspended wood floor for classes and rehearsals. Dance concerts are sometimes presented in the studio, in addition to Pickard Theater, Kresge Auditorium, and the Museum of Art, as well as in unconventional spaces such as the squash courts and outside on the Quad.

Besides student and faculty performances, the Division of Dance sponsors visits by nationally known dance companies, choreographers, and critics for teaching residencies and performances. Often as part of the Bates-Bowdoin-Colby Dance Alliance, the program has sponsored performances that range from baroque dance and ballet to tap, modern, and performance art. A partial list includes, for baroque and ballet, the Court Dance Company of New York, the Ken Pierce Baroque Dance Company, and the Berkshire Ballet; for jazz and jazz-tap, Impulse Dance Company and the Copasetics; for modern forms, Meredith Monk, Douglas Dunn, Pauline Koner, Kei Takei, Pilobolus, Wendy Perron, Dana Reitz, Phoebe Neville, Susan Foster, Art Bridgman and Myrna Packer, Doug Varone, Johanna Boyce, Richard Bull Dance Company, Jim Coleman/Terese Freedman, UMO Performance Ensemble, and Irène Hultman; and dance critics Laura Shapiro, Marcia B. Seigel, and Jill Johnston. These professionals teach master classes and offer lecture/demonstrations as part of their visits to campus, and often are commissioned to create a piece especially for the Bowdoin dancers.

Music

Music performance at Bowdoin ranges from informal student repertory sessions to professional performances by visiting artists, and from solo recitals to large-scale performances for chorus and orchestra. Many ensembles, such as the Chamber Choir, Bowdoin Symphony Orchestra, College Chorus, and Concert Band, are part of the curricular program. Credit is also given for participation in the Brass Quintet, String Quartet, and Schola Cantorum, a small vocal ensemble drawn from the Chamber Choir. Other groups, such as the Polar Jazz Ensemble, are sponsored by students.

The Chamber Choir is a select group of approximately twenty-five singers that performs a wide variety of choral and soloistic music. Its repertoire includes music from the Middle Ages to the avant-garde, from jazz and folk to Bach and Brahms. Recent tours have taken the choir to Europe, Canada, New Orleans, and Puerto Rico. The Bowdoin College Chorus is a choral

ensemble composed of students, faculty, staff, and community members. Recent performances by the Chorus include Brahms's *Liebeslieder Waltzes*, J. S. Bach's *Easter Oratorio*, and Fauré's *Requiem*.

The Bowdoin Symphony Orchestra is an auditioned ensemble also drawn from the community at large. Its performances include works from the standard repertoire, such as Mozart and Beethoven symphonies, as well as interesting, less well known works and premiers of new student compositions. The Concert Band often performs at campus ceremonies, such as James Bowdoin Day, and it also plays on-campus concerts of the standard repertoire and contemporary arrangements.

Both early music and contemporary music receive considerable emphasis at Bowdoin, and the music department recently won a national award for its support of American music. Early music is furthered through a collection of early instruments, such as gambas, shawms, cornetti, and members of the lute family, as well as two harpsichords and a tracker-action organ, gift of Chester William Cooke III '57. Entire concerts are often devoted to a particular early-music repertoire, such as that of the sixteenth-century Spanish court. Recent visiting early-music artists include the Tallis Scholars, Musica Antiqua Köln, and harpsichordist Igor Kipnis.

Contemporary music is supported by a recently updated electronic music studio, including Macintosh computers, digital mixers, and software synthesis. There are also frequent visits by guest composers such as Karel Husa, Pauline Oliveros, George Crumb, and Thea Musgrave, and a biennial festival of contemporary choral music. Student compositions are often heard on campus. The performance of American music has included visits by professional jazz ensembles such as the Billy Taylor Trio and the production of Otto Luening's opera *Evangeline*.

Other visiting artists in recent years have included Eugenia Zukerman, the Los Angeles Piano Quartet, Joan Morris and William Bolcom, the Chinese Music Ensemble of New York, the Lydian String Quartet, and Kurt Ollmann. In addition to performing, the artists often teach master classes and hold discussions with students.

Bowdoin owns a collection of orchestral and band instruments and over twenty grand pianos available for use by students studying and performing music. Soloists and ensembles perform in a number of halls on campus, including the Gibson Recital Hall, Kresge Auditorium, Pickard Theater, and the Chapel, which houses a forty-five-rank Austin organ. Private instruction in piano, organ, harpsichord, voice, and all the major orchestral instruments is available.

Student Life

CAMPUS LIFE AT BOWDOIN combines traditional features of the liberal arts college with modern facilities and a wide range of extracurricular programs. Within this framework, students are encouraged to develop their talents and capacities for leadership. Along with the library, laboratories, Museum of Art and Peary-MacMillan Arctic Museum, visual arts center, concert and lecture halls, Moulton Union, health center, and athletic facilities, the less tangible—but more important—intellectual resources of the College play a prominent part in the undergraduate experience. Art shows, lectures, concerts, films, dramatic productions, community service, student government, and student organizations all enrich the student's work within the formal curriculum.

RESIDENTIAL LIFE

The College provides several different arrangements for housing, ranging from traditional residence halls and the multi-story Coles Tower to small, “family-style” houses and apartments. Whatever the setting, student life at Bowdoin is governed by the College's Social Code and by the expectation that residents will display mutual respect and consideration. Students in College housing are expected to respect the rights and property of their fellow students and of the College, and to abide by College residence rules.

First-year students must reside in College-owned facilities and must participate in a meal plan offering either full board (19 meals) or full board without breakfast (14 meals). Most students dine at Moulton Union or Wentworth Hall. Students who request and accept room accommodations in the fall are obligated to pay a full academic year's rent for those accommodations. Students who live in campus residences or fraternities are required to maintain a regular board contract with the Centralized Dining Service. Students living in College apartments or at 30 College Street are not required to take a regular board contract.

Proctors, Resident Assistants, and Earl S. Thompson Interns

The general comfort of residents, informal peer counseling, and the maintenance of order in the residence halls are the responsibility of student staff selected from the sophomore, junior, and senior classes and appointed by the Office of the Dean of the College. Proctors live in College residences and play an important part in the residential life of the College. Proctors are trained to help new students become familiar with the resources and opportunities at Bowdoin. They assist in planning social activities, refer students to College services, and can explain Bowdoin policies and traditions.

Resident assistants provide administrative and programming assistance in the College apartments, Smith or Copeland houses, and at 30 College Street.

The Thompson Interns live in Coles Tower and provide administrative oversight of the building.

Coeducational Fraternities

There are eight coeducational fraternities at Bowdoin. A May 1992 vote of the Governing Boards prohibits single-sex fraternities and sororities at Bowdoin and confirms the College's commitment to coeducation. Approximately 40 percent of Bowdoin students join a fraternity at some time in their career at the College. About 150 students live in the houses. Other members live in College housing but frequently eat meals in their fraternity house dining rooms. Most of the houses are located adjacent to the campus and are independently owned and operated by alumni house corporations. All Bowdoin social and safety regulations apply to fraternity members and to the houses.

For their members, fraternities can be an important part of college life, providing a focus for social activities and enabling the sharing of educational concerns and daily living experiences. Membership affords students an opportunity to assume responsibilities in self-governance within the houses and offers exposure to the history and traditions of the fraternities and the College.

Religious Life

Religious activities at Bowdoin are organized by the students. In recent years, the Bowdoin Christian Fellowship, the Bowdoin Jewish Organization, the Canterbury Club, and the Newman Apostolate have been active on campus. Each has planned activities appropriate to its membership.

CODES OF CONDUCT

The success of the Academic Honor Code and Social Code require the active commitment of the College community. Bowdoin College expects its students to be responsible for their behavior on and off the campus, and to assure the same behavior of their guests.

Uncompromised intellectual inquiry lies at the heart of a liberal education. Integrity is essential in creating an academic environment dedicated to the development of independent modes of learning, analysis, judgment, and expression. Academic dishonesty, in or out of the classroom, is antithetical to Bowdoin's institutional values.

The Academic Honor Code plays a central role in the intellectual life of Bowdoin. Students and faculty are obligated to ensure its success. Since 1964, with revisions in 1977 and 1993, the community pledge of personal academic integrity has formed the basis for academic conduct at Bowdoin College. The institution assumes that all students possess the attributes implied by intellectual honesty.

The Social Code describes certain rights and responsibilities of students. While it imposes no specific morality on students, the College requires certain standards of behavior to secure the safety of the College community and ensure that the campus remains a center of learning.

Individuals who suspect violations of the Academic Honor Code and/or Social Code should not attempt to resolve the issues independently, but are encouraged to refer their concerns to the Dean of Students' Office. The College reserves the right to impose sanctions on students who violate these codes.

The Dean of Students' Office is responsible for the administration of the disciplinary process at Bowdoin College. The Judicial Board shall review cases referred by the Dean of Students' Office. In Academic Honor Code cases, the Judicial Board decisions remain final, pending the appeal process as described in the *Student Handbook*. In Social Code cases, the Judicial Board's decision is a recommendation to the Dean of Students' Office. The appeals process is described in the *Student Handbook*.

Imposed decisions are implemented by the Dean of Students' Office.

Academic Honor Code

Initiated by students, the Academic Honor Code places complete responsibility on individual students for integrity in all academic work, including the use of the library. During registration, students sign a pledge signifying that they understand and agree to abide by the Bowdoin College Academic Honor Code. In so doing, students pledge neither to give nor to receive unacknowledged aid in any academic undertaking.

It is each student's responsibility to become familiar with the Academic Honor Code and with the guidelines expressed in *Sources: Their Use and Acknowledgment*, which is distributed to all students before matriculation. Specific information regarding the code and the judicial process are contained in the *Student Handbook*.

Social Code

The responsibility for creating a harmonious community among students with different backgrounds and conflicting personal values rests, in large part, with students themselves. Conflicts that cannot be resolved informally are adjudicated through the Bowdoin College Social Code. The Social Code requires that all students conduct themselves in accordance with local, state, and federal laws. It protects the rights of all students to privacy and to full participation in the life of the College community. In residences, in particular, the Social Code stipulates that the quiet necessary for academic pursuits will prevail.

As with the Academic Honor Code, students must subscribe to the Social Code at registration. The code states that "the success of the Social Code requires the active commitment of all members of the community to the principles on which life at Bowdoin is based." When instances of suspected misconduct occur, the code recommends an informal resolution initially. Persistent and serious violations of the Social Code may be brought to the attention of the Dean of Students' Office and to the Judicial Board. Specific provisions and administration of the Social Code, as well as the College's

policies on illegal drugs, alcohol, and sexual misconduct, are found in the *Student Handbook*.

STUDENT GOVERNMENT

All students enrolled at the College are members of the Student Assembly. A candidate for office must present a petition signed by at least fifty students in order to be eligible to run. Elections are held each fall. The Executive Board thus chosen consists of fifteen regular members and fifteen members at large, who appoint their officers for the duration of the academic year.

The Executive Board meets weekly and is charged with presenting student opinion to the administration; overseeing all chartered student organizations; maintaining standing committees, including the Student Judicial Board, which administers the Honor Code Constitution and the provisions of the Social Code; filling student positions on faculty and Governing Boards committees; and supervising class officer elections.

STUDENT SERVICES

The College provides a variety of services designed to promote the academic, physical, and psychological well-being of its students and to advance their occupational interests.

Career Services

The Office of Career Services (OCS) complements the academic mission of the College. A major goal of OCS is to introduce undergraduates and alumni/ae to the process of career planning, which includes self-assessment, career exploration, goal-setting, and the development of an effective job search strategy. Students are encouraged to visit OCS early during their college years for counseling and information on internships and summer jobs. OCS assists seniors in their transition to work or graduate study and prepares them to make future career decisions.

A staff of four is available for individual career counseling. Workshops and presentations provide assistance in identifying skills, writing resumes, preparing for interviews, and refining job-hunting techniques. Panel discussions and informational meetings throughout the year are designed to broaden students' awareness of their career options and to enhance their understanding of the job market. Guidance regarding graduate and professional school study is offered as well. In counseling style and program content, OCS addresses the needs of those with diverse interests, attitudes, and expectations.

Each year, nearly 40 companies, 65 graduate and professional schools, and a significant number of secondary schools and nonprofit employers participate in on-campus recruiting programs. Bowdoin is also a member of interviewing consortia in Bangor, Portland, Boston, Washington, D.C., and New York City. The office subscribes to more than a dozen periodicals listing

current job opportunities, and houses information on more than 1,000 summer and semester internships.

Career Services continually updates an alumni/ae advisory network and a resource center located on the second floor of the Moulton Union. A weekly newsletter publicizes all OCS events and programs in addition to internship and job openings.

Health Services

The Dudley Coe Health Center provides medical and nursing services to students on a walk-in basis, Monday through Friday, from 8:00 A.M. to 8:00 P.M., and Saturday and Sunday, from 1:00 P.M. to 5:00 P.M. Complete gynecologic services are available by appointment. The health center holds a weekly orthopedic clinic and provides diagnostic X-ray services. Physicians, registered nurses, a physician's assistant, a nurse practitioner, and a radiologic technologist work together to staff the student health services.

The Dudley Coe Health Center works closely with the local medical community and area hospitals to provide comprehensive health care to all Bowdoin students.

Counseling Service

The Counseling Service is staffed by experienced mental health professionals (trained in psychology, social work, or counseling) who are dedicated to helping students resolve personal and academic difficulties and maximize their psychological and intellectual potential. The counseling staff assists students who have concerns about anxiety, depression, academic pressure, family conflicts, roommate problems, alcohol and drug use, date rape, eating disorders and body image, sexuality, intimate relationships, and many other matters. In addition to providing individual and group counseling, the staff conducts programs and workshops and provides training and consultation for the Bowdoin community. When appropriate, counselors may refer students to a consulting psychiatrist for evaluation or prescription and/or monitoring of psychoactive medication. The Counseling Service maintains a particularly strong commitment to promoting diversity and enhancing cross-cultural understanding. Information disclosed by a student to his or her counselor is subject to strict confidentiality.

Students may schedule a counseling appointment by calling ext. 3145 or stopping by the office in person. Regular hours are from 8:30 A.M. to 5:00 P.M., Monday through Friday. A walk-in "emergency" hour is set aside each weekday from 4:00 P.M. to 5:00 P.M. for any student who may be experiencing a personal crisis that warrants immediate attention. After hours and on weekends, students may reach an on-call counselor for emergency consultation by coming to or calling the Dudley Coe Health Center (ext. 3500) or by calling Security (ext. 3314) when the Health Center is closed.

Counseling Service counselors also provide brief counseling and referral services to all Bowdoin employees through the College's Employee Assistance Program (EAP). Employees may call the Counseling Service to schedule an appointment during regular hours, or may arrange to see an off-campus EAP counselor (Anne Funderburk, L.C.S.W.) by calling 729-7710.

The Counseling Service offices are located on the third floor of the Dudley Coe Health Center.

Security

Bowdoin maintains a staff of trained, uniformed security officers who are on duty 24 hours a day to respond to emergencies and to maintain a regular patrol of the campus. Assistance can be summoned by using the College telephone system. The Security Communications Center is open 24 hours a day at extension 3314 for information. For emergencies, call extension 3500 or 725-3500.

The Security Office is open Monday through Friday from 8:30 to 11:30 A.M. and from 12:30 to 5:00 P.M. Student identification cards and vehicle registrations may be obtained from the Security Office between the hours of 2:30 and 4:30 P.M., Monday through Friday.

All students who bring a vehicle to campus with them are required to register their vehicle with Campus Security. Students are assigned a specific parking location and are issued a decal for their assigned parking lot. Proof of insurance and state vehicle registration must be presented when registering with Campus Security. A \$10 fee, which is subject to change, is charged for the parking decal.

A free shuttle service operates from 7:30 P.M. to 11:00 P.M., Sunday through Thursday, and from 7:30 P.M. to 2:00 A.M., Friday and Saturday, during the academic year. The service is "on demand," and students must call extension 3337 or 725-3337 for a ride. After 2:00 A.M., students may call the same number, and transportation will be provided by a Security vehicle. Students are encouraged to use the service, which provides transportation within campus and to the outskirts of campus.

ATHLETICS AND PHYSICAL EDUCATION

Bowdoin believes that physical education is an important part of the total educational program. The Department of Athletics provides students with opportunities for satisfying experiences in physical activities for the achievement of health and physical fitness. The physical education program includes classes that emphasize instruction in sports activities with carry-over value, intramural athletics, and intercollegiate competition. Students are encouraged to use the athletic facilities to participate in free recreational play.

Intercollegiate Athletics

During the past year, Bowdoin offered intercollegiate competition in the following varsity sports: Men's teams were fielded in baseball, basketball, cross country, football, hockey, lacrosse, skiing, soccer, squash, swimming, tennis, and track (winter and spring); women's teams were fielded in basketball, cross country, field hockey, ice hockey, lacrosse, skiing, soccer, softball, squash, swimming, tennis, track (winter and spring), and volleyball; coed teams were offered in golf and sailing.

Club Sports

The following club sports are active at Bowdoin: crew, rugby, water polo, and ultimate frisbee.

Physical Education

The instructional program includes a wide variety of activities utilizing campus and off-campus facilities, both natural and man-made. The activities have been selected to provide the Bowdoin community (students, faculty, and staff members) with the opportunity to receive basic instruction in exercises and leisure-time activities. It is hoped that participants will develop these activities into lifelong commitments. The program varies from year to year to meet current interests.

Intramural Athletics

Men's, women's, and coeducational leagues at the novice, intermediate, and advanced levels are offered in basketball, touch football, ultimate frisbee, hockey, outdoor soccer, softball, indoor and outdoor volleyball, and water basketball. All students and members of the faculty and staff are eligible to participate in the intramural program unless they are playing for a corresponding varsity, junior varsity, or club team. A coed tennis tournament and triathlon are held each fall and spring.

Outdoor Facilities

The outdoor athletic facilities of the College are excellent. Whittier Field is a tract of 5 acres that is used for football games and also includes a 400-meter, all-weather track. It has a grandstand with team rooms beneath it. Pickard Field is a tract of 35 acres that includes baseball and softball diamonds; spacious playing fields for football, lacrosse, rugby, soccer, softball, and touch football; eight tennis courts; and a cross-country ski track.

Indoor Facilities

The College possesses indoor facilities that are the equal of its outstanding outdoor facilities. Morrell Gymnasium contains a modern basketball court with seats for about 2,000 persons; two visiting team rooms; 11 squash courts; a locker room with 480 lockers; shower facilities; a modern, fully equipped training room; offices for the director of athletics and his staff; and

other rooms for physical education purposes. Sargent Gymnasium includes a weight-training room, a Nautilus room, a special exercise room, a regulation basketball court, a training room, and locker rooms with 470 lockers. The William Farley Field House contains a 200-meter, 6-lane track, a weight room, and four tennis courts adjacent to a 114-by-75-foot, 16-lane pool with one 3-meter and two 1-meter diving boards; a trainers' room; locker and equipment rooms; space for aerobics; and meeting rooms. Completing the athletic facilities is the Dayton Arena, which has a 200-by-85-foot refrigerated ice surface and seating accommodations for 2,600 spectators.

STUDENT ACTIVITIES

There are more than 60 active student organizations at Bowdoin, and additional groups are frequently formed by students with similar interests. Among the oldest groups are the Outing Club, the *Orient*, and Masque and Gown, a student-run dramatic organization. For a complete list and descriptions of student organizations, please consult the *Student Handbook*.

Bowdoin recognizes excellence not only in the classroom, but on the playing field and in the community as well. For a complete list of awards granted in various areas, please see the appendix "Prizes and Distinctions," page 255.

The Moulton Union is the center of student activity planning. It contains the Information Center, the bookstore, Student Executive Board headquarters, lounges, the Bear Necessity (coffee house-pub), the mailroom, meeting rooms, the Bear Buns Café, an on-campus travel agency, the WBOR broadcasting station, and other facilities. The offices of the director of the Moulton Union, the student activities coordinator, the director of events, and Career Services are located in the Union.

Alumni Organizations

Alumni Association

The Bowdoin College Alumni Association has as its purpose “to further the well-being of the College and its alumni by stimulating the interest of its members in the College and each other through the conduct of programs by and for alumni.” Membership is open to former students who during a minimum of one semester’s residence earned at least one academic credit toward a degree, to those holding Bowdoin degrees, and to anyone elected to membership by the Executive Committee of the Alumni Council.

Alumni Council

Officers: David M. Cohen ’64, president; Iris W. Davis ’78, vice president; Heather T. Kenvin Hietala ’83, secretary and treasurer.

Members-at-Large. Terms expire in 1994: David M. Cohen ’64, Molly Hoagland King ’80, Gregory V. McQuater ’72, Steven H. Hughes ’79. Terms expire in 1995: Maurice A. Butler ’74, Iris W. Davis ’78, Harper Sibley III ’76, Paul H. Wiley ’71. Terms expire in 1996: David B. Klingaman ’62, Robert L. Morrell ’47, Robert V. Peixotto ’77, John A. Woodcock, Jr. ’72. Terms expire in 1997: Douglas C. Bates ’66, Donald C. Ferro ’68, Jane McKay Morrell ’81, Berle M. Schiller ’65.

Other members of the council are the editor of *Bowdoin* magazine, a representative of the faculty, the secretary of the College, the director of Annual Giving, the directors of the Alumni Fund, representatives of recognized alumni clubs, one member of the Afro-American Alumni Council, the national chair of BASIC, and three undergraduates. *Ex officio* members are the vice president for development and alumni relations and the secretary of the College.

Alumni Council Awards

Alumni Service Award: First established in 1932 as the Alumni Achievement Award and renamed the Alumni Service Award in 1953, this award is made annually to the person who, in the opinion of alumni, as expressed by the Alumni Council, best represents the alumnus or alumna whose services to Bowdoin most deserve recognition.

The recipient in 1993 was I. Joel Abromson ’60.

Alumni Award for Faculty and Staff: Established by the Alumni Council in 1963, it is presented each year “for service and devotion to Bowdoin, recognizing that the College in a larger sense includes both students and alumni.” The award is made at the annual Homecoming Luncheon in the fall and consists of a Bowdoin clock and a framed citation.

The co-recipients in 1993 were Martha J. Adams and Elroy O. LaCasce, Jr. ’44.

Distinguished Bowdoin Educator Award: Established in 1964 to recognize outstanding achievement in education by a Bowdoin alumnus, except alumni who are members of the Bowdoin faculty and staff, the award consists of a framed citation and \$500. In 1985, the council voted to honor achievement both at the college/university level and at the primary/secondary level.

The recipients in 1993 were Peter F. Hayes '68 at the college/university level and, at the primary/secondary level, A. Austin Albert '55.

Bowdoin Magazine

Established in 1927, *Bowdoin* magazine is published three times a year and contains articles of general interest about the College and its alumni. It is sent without charge to all alumni, seniors, parents of current students and recent graduates, faculty and staff members, and various friends of the College.

Bowdoin Alumni School and Interviewing Committees (BASIC)

BASIC is a volunteer association of approximately 400 alumni in the United States and several foreign countries which assists the Admissions Office in the identification and evaluation of candidates. BASIC responsibilities include providing alumni interviews for applicants when distance or time precludes a visit to Brunswick, representing the College at local "college fair" programs, and, in general, serving as liaison between the College and prospective students.

Those interested in learning more about the BASIC organization should contact the Admissions Office.

Alumni Fund

The Alumni Fund, inaugurated in 1869 and reorganized in 1919 and 1983, has as its principal task the raising of unrestricted or currently expendable (budget-relieving) funds for current purposes. In 1991-92 the Fund total was \$3,004,325, with 52% of the alumni participating.

Officers: Harry L. Silverman '64, chair; David Z. Webster '57, vice chair.

Directors: Harry L. Silverman '64 (term expires in 1994), David Z. Webster '57 (term expires in 1995), Elizabeth K. Glaser '81 (term expires in 1996), Kenneth M. Cole III '69 (term expires in 1997), Alan R. Titus '66 (term expires in 1998).

Alumni Fund Awards

Alumni Fund Cup: Awarded annually since 1932, the Alumni Fund Cup recognizes the Reunion Class making the largest contribution to the Alumni Fund, unless that Reunion Class wins the Babcock Plate; in that event, the non-Reunion Class with the most money in the Fund is awarded the cup.

The recipient in 1992 was the Class of 1975, Leo J. Dunn III, class agent.

Leon W. Babcock Plate: Presented to the College in 1980 by William L. Babcock, Jr. '69, and his wife, Suzanne, in honor of his grandfather, Leon W.

Babcock '17, it is awarded annually to the class making the largest dollar contribution to the Alumni Fund.

The recipient in 1992 was the Class of 1957, David Z. Webster, class agent, and Erik Lund, special gifts chairman.

Class of 1916 Bowl: Presented to the College by the Class of 1916, it is awarded annually to the class whose record in the Alumni Fund shows the greatest improvement over its performance of the preceding year.

The recipient in 1992 was the Class of 1962, Peter B. Webster, class agent, and Alan R. Titus, special gifts chairman.

Class of 1929 Trophy: Presented by the Class of 1929 in 1963, it is awarded annually to that one of the ten youngest classes attaining the highest percentage of participation.

The recipient in 1992 was the Class of 1985, Dana J. Bullwinkel-Campbell, David E. Criscione, and Robert R. Forsberg, Jr., class agents.

Robert Seaver Edwards Trophy: Awarded annually to that one of the ten youngest classes raising the most money for the Fund, this trophy honors the memory of Robert Seaver Edwards, Class of 1900.

The recipient in 1992 was the Class of 1982, John A. Miklus and Michael J. Quinlan, class agents, and David Emerson, special gifts chairman.

Fund Directors' Trophy: Established in 1972 by the directors of the Alumni Fund, the trophy is awarded annually to the class which, in the opinion of the directors, achieved an outstanding performance not acknowledged by any other trophy.

The recipients in 1992 were the Class of 1967, Peter R. Merry, class agent; and the Class of 1977, Sandra Stone Hotchkiss and Bruce J. Lynskey, class agents, and Jeffrey B. Goldenberg, Laurie A. Hawkes, Robert F. White, and Bracebridge H. Young, Jr., special gifts chairs.

\$100,000 Club: Established by the directors in 1989 and retroactive to the Fund year 1984–85, the \$100,000 Club recognizes each class agent who has led his or her class over the \$100,000 figure during an Alumni Fund year.

The recipients in 1992 were David Z. Webster '57, class agent, and Erik Lund '57, special gifts chairman; Peter B. Webster '62, class agent, and Alan R. Titus '62, special gifts chairman; Sandra Stone Hotchkiss '77 and Bruce J. Lynskey '77, class agents, and Jeffrey B. Goldenberg '77, Laurie A. Hawkes '77, Robert F. White '77, and Bracebridge H. Young, Jr. '77, special gifts chairs.

Robert M. Cross Awards: Established by the directors in 1990, the Robert M. Cross Awards are awarded annually to those class agents whose outstanding performance, hard work, and loyalty to Bowdoin, as personified by Robert M. Cross '45 during his many years of association with the Fund, are deserving of special recognition.

The recipients in 1992 were David Z. Webster '57 and Peter B. Webster '62.

The President's Cup for Alumni Giving

Established by the Development Committee of the Governing Boards in 1985, two cups are awarded annually—one for classes out of college forty-nine years or less, and one for classes out of college fifty years or more. The awards are presented on the basis of the total giving effort of a class, with all gifts actually received by or for the benefit of the College during the academic year eligible.

The recipients in 1992 were the Class of 1975 and the Class of 1922.

Society of Bowdoin Women

The Society of Bowdoin Women was formed in 1922 to provide “an organization in which those with a common bond of Bowdoin loyalty may, by becoming better acquainted with the College and with each other, work together to serve the College.”

The Society of Bowdoin Women continues to adapt its focus to support the changing needs of the College. The Edith Lansing Koon Sills Lecture Fund, established in 1961, is used to sponsor cultural, career, and literary speakers. The Society of Bowdoin Women Foundation, created in 1924, provided resources for the College's general use. With the inception of coeducation at Bowdoin in 1971, the Society decided to restrict the funds to provide annual scholarships to qualified women students and renamed it the Society of Bowdoin Women Scholarship Foundation. The Society of Bowdoin Women Athletic Award, established in 1978, recognizes effort, cooperation, and sportsmanship by a senior member of a women's varsity team. The Dorothy Haythorn Collins Award, created in 1985, honors a junior student exemplifying overall excellence and outstanding performance in his or her chosen field of study.

The Society's programs and activities are made possible by dues, contributions, and bequests. Membership is open to any interested person by payment of annual dues of \$3.00.

Officers: Kimberly Labbe Mills '82, president; Blythe Bickel Edwards, honorary president; O. Jeanne d'Arc Mayo, vice president; Victoria L. Kallin, secretary; Joan R. Shepherd, treasurer; Carla L. Shaw, activities coordinator; Mary Scott Brownell, nominating.

Association of Bowdoin Friends

Founded in 1984, the Association of Bowdoin Friends is a volunteer group of Brunswick-area residents who share an interest in the well-being of the College. The Bowdoin Friends actively support the College library, museums, and music and athletics programs. Friends regularly attend lectures, concerts, and special programs on campus, and many audit classes. Activities sponsored by the association include bus trips to New England museums, and receptions and dinners held in conjunction with presentations by Bowdoin faculty and students.

Bowdoin Friends contribute to the life of the College through orientation programs for new students and through the Host Family Program. Welcoming new students to campus and to Brunswick, the Friends provide information about the local area and day trips along the coast for first-year students. The Host Family Program pairs local families with international students, teaching fellows, and visiting faculty, as well as interested first-year students, easing the transition to College life and fostering lasting friendships. Through this program, international students and faculty are offered a taste of American life and culture.

A \$25 annual fee is required of all Bowdoin Friends who wish to receive copies of the College calendar and magazine.

Steering Committee: Robert S. Day, chair; Christine Millar, vice chair; Mary Elizabeth Carman; June M. Coffin; Warren R. Dwyer; Patricia E. Ford; Nancy K. Higgins; Margaret Hutchins; Gordon F. O'Donnell; Joan C. Phillips, Richard I. Stark, Mary Ellen Van Lunen.

Summer Programs

BOWDOIN COLLEGE SUMMER programs provide an opportunity for a variety of people to enjoy the College's facilities and to benefit from the expertise of Bowdoin faculty and staff during the nonacademic portion of the year. Summer programs consist of educational seminars, professional conferences, sports clinics, specialized workshops, and occasional social events that are appropriate to the College's overall mission as an educational institution and as a member of the Maine community.

The longest-running summer program involving members of the Bowdoin faculty is the **Infrared Spectroscopy Course**. Initiated at Massachusetts Institute of Technology in 1950, the program moved to Bowdoin in 1971. Over two thousand scientists have come to campus to work with the original staff.

Upward Bound, in its twenty-seventh year at Bowdoin, is one of over 450 similar programs hosted by colleges across the country. Funded by the U.S. Department of Education, these programs have as their primary purpose the preparation of high school students from low-income families for entry into institutions of higher education.

Founded in 1964, the **Bowdoin Summer Music Festival** incorporates a music school, a concert series featuring internationally acclaimed guest artists and the Festival's renowned faculty, and the Gamper Festival of Contemporary Music. Approximately 140 gifted performers of high school, college, and graduate school levels participate in a concentrated six-week program of instrumental, chamber music, and composition studies with the Festival's faculty, which is composed of teacher-performers from leading conservatories.

In 1971 the College athletic department began offering the popular **Hockey Clinic**, a hockey school with three sessions. Participants, ranging from nine to eighteen years old, come from throughout the United States to train with Bowdoin coaches as well as coaches from other colleges and academies with outstanding hockey programs.

Each year additional camps are offered by members of the athletic staff in tennis, basketball, and soccer. A day camp for children from seven to fourteen years old is based in Farley Field House.

In addition to the four long-term College-sponsored programs described above, other programs brought to campus by Bowdoin faculty, staff, and outside associations attract several thousand people to the College each summer. Groups such as Elderhostel and many of the science conferences draw their participants on the strength of Bowdoin's reputation for an outstanding teaching faculty who share their talents with summer program guests.

Persons interested in holding a conference at Bowdoin should contact the Office of Special and Summer Programs, which schedules all summer activities and coordinates dining, overnight accommodations, meeting space, audiovisual services, and other amenities.

Officers of Government

PRESIDENT OF THE COLLEGE

Robert Hazard Edwards, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Carleton), President of the College.

PRESIDENT AND TRUSTEES

Paul Peter Broutas, A.B. (Bowdoin), B.A., M.A. (Oxford), J.D., LL.B. (Harvard), *Chair*. Elected Overseer, 1974; elected Trustee, 1984. Term expires 2000.

Rosalynne Spindel Bernstein, A.B. (Radcliffe), J.D. (Maine). Elected Overseer, 1973; elected Trustee, 1981. Term expires 1997.

Leonard Wolsey Cronkhite, Jr., A.B. (Bowdoin), M.D. (Harvard), LL.D. (Bowdoin, Northeastern), L.H.D. (Curry). Elected Overseer, 1969; elected Trustee, 1970. Term expires 1994.

William Harris Hazen, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1981; elected Trustee, 1993. First term expires 2001.

Caroline Lee Herter. Elected Overseer, 1976; elected Trustee, 1988. First term expires 1996.

John Roscoe Hupper, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1970; elected Trustee, 1982. Term expires 1998.

Dennis James Hutchinson, A.B. (Bowdoin), M.A. (Oxford), LL.M. (Texas–Austin). Elected Overseer, 1975; elected Trustee, 1987. First term expires 1995.

John Francis Magee, A.B. (Bowdoin), M.B.A. (Harvard), A.M. (Maine). Elected Overseer, 1972; elected Trustee, 1979. Term expires 1995.

Richard Allen Morrell, A.B. (Bowdoin). Elected Overseer, 1979; elected Trustee, 1989. First term expires 1997.

Jean Sampson, A.B. (Smith). Elected Overseer, 1976; elected Trustee, 1986. First term expires 1994.

Carolyn Walch Slayman, A.B. (Swarthmore), Ph.D. (Rockefeller), Sc.D. (Bowdoin). Elected Overseer, 1976; elected Trustee, 1988. First term expires 1996.

Frederick Gordon Potter Thorne, A.B. (Bowdoin). Elected Overseer, 1972; elected Trustee, 1982. Term expires 1998.

TRUSTEES EMERITI

- Peter Charles Barnard**, A.B. (Bowdoin), A.M. (Middlebury). Elected Secretary, 1977; elected secretary of the president and trustees emeritus and overseer emeritus, 1991.
- James Stacy Coles**, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack). President of the College, 1952–1967; elected emeritus, 1977.
- David Watson Daly Dickson**, A.B. (Bowdoin), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1966; elected Trustee, 1975; elected emeritus, 1982.
- Arthur LeRoy Greason**, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D. Litt. (Wesleyan), L.H.D. (Colby, Bowdoin, Bates). President of the College, 1981–1990; elected emeritus, 1990.
- Merton Goodell Henry**, A.B. (Bowdoin), LL.B. (George Washington), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1974; elected emeritus, 1987.
- Roscoe Cunningham Ingalls, Jr.**, B.S. (Bowdoin). Elected Overseer, 1968; elected Trustee, 1973; elected emeritus, 1989.
- William Curtis Pierce**, A.B. (Bowdoin), LL.B. (Harvard), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1967; elected emeritus, 1981.
- Everett Parker Pope**, B.S., A.M., LL.D. (Bowdoin). Elected Overseer, 1961; elected Trustee, 1977; elected emeritus, 1988.
- Winthrop Brooks Walker**, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1966; elected Trustee, 1970; elected emeritus, 1986.
- Richard Arthur Wiley**, A.B. (Bowdoin), B.C.L. (Oxford), LL.M. (Harvard). Elected Overseer, 1966; elected Trustee, 1981; elected emeritus, 1993.
-
- Robert H. Millar**, A.B. (Bowdoin), B.Div. (Yale), *Secretary*. Elected 1991.

THE BOARD OF OVERSEERS

- Marvin Howe Green, Jr.** *President*. Elected Overseer, 1985. Term expires 1997.
- David Alexander Olsen**, A.B. (Bowdoin). *Vice President*. Elected Overseer, 1986. Term expires 1998.
- Thomas Hodge Allen**, A.B. (Bowdoin), B.Phil. (Oxford), J.D. (Harvard). Elected Overseer, 1985. Term expires 1997.
- Walter Edward Bartlett**, A.B. (Bowdoin). Elected Overseer, 1990. First term expires 1996.

- David Pillsbury Becker**, A.B. (Bowdoin), A.M. (New York University). Elected Overseer, 1986. Term expires 1998.
- Theodore Hamilton Brodie**, A.B. (Bowdoin). Elected Overseer, 1983. Term expires 1995.
- Tracy Jean Burlock**, A.B. (Bowdoin). Elected Overseer, 1990. First term expires 1996.
- George Hench Butcher III**, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1985. Term expires 1997.
- Thomas Clark Casey**, A.B. (Bowdoin), M.B.A. (Stanford). Elected Overseer, 1989. First term expires 1995.
- Philip R. Cowen**, B.S. (New York University). Elected Overseer, 1993. First term expires 1999.
- J. Taylor Crandall**, A.B. (Bowdoin). Elected Overseer, 1991. First term expires 1997.
- Peter Frank Drake**, A.B. (Bowdoin), Ph.D. (Bryn Mawr). Elected Overseer, 1992. First term expires 1998.
- Stanley Freeman Druckenmiller**, A.B. (Bowdoin). Elected Overseer, 1991. First term expires 1997.
- Frank John Farrington**, A.B. (Bowdoin), M.S. (The American College). Elected Overseer, 1984. Term expires 1996.
- Leon Arthur Gorman**, A.B., LL.D. (Bowdoin). Elected Overseer, 1983. Term expires 1995.
- Gordon Francis Grimes**, A.B. (Bowdoin), B.A. (Cambridge), J.D. (Boston). Elected Overseer, 1986. Term expires 1998.
- Kenneth David Hancock**, A.B. (Bowdoin). Elected Overseer, 1988. First term expires 1994.
- Laurie Anne Hawkes**, A.B. (Bowdoin), M.B.A. (Cornell). Elected Overseer, 1986. Term expires 1998.
- Judith Magyar Isaacson**, A.B. (Bates), A.M. (Bowdoin). Elected Overseer, 1984. Term expires 1996.
- Donald Richardson Kurtz**, A.B. (Bowdoin), M.B.A. (Columbia). Elected Overseer, 1984. Term expires 1996.
- Samuel Appleton Ladd III**, A.B. (Bowdoin). Elected Overseer, 1991. First term expires 1997.
- Diane Theis Lund**, A.B. (Stanford), J.D. (Harvard). Elected Overseer, 1985. Term expires 1997.
- George Calvin Mackenzie**, A.B. (Bowdoin), M.A. (Tufts), Ph.D. (Harvard). Elected Overseer, 1986. Term expires 1998.

- Cynthia Graham McFadden**, A.B. (Bowdoin), LL.B. (Columbia). Elected Overseer, 1986. Term expires 1998.
- Robert H. Millar**, A.B. (Bowdoin), B.Div. (Yale). Secretary of the President and Trustees, *ex officio*.
- Campbell Barrett Niven**, A.B. (Bowdoin). Elected Overseer, 1986. Term expires 1998.
- Michael Henderson Owens**, A.B. (Bowdoin), M.D., M.P.H. (Yale). Elected Overseer, 1988. First term expires 1994.
- Louis Robert Porteous, Jr.**, A.B. (Bowdoin), LL.D. (Portland School of Art). Elected Overseer, 1982. Term expires 1994.
- Hollis Susan Rafkin-Sax**, A.B. (Bowdoin). Elected Overseer, 1988. First term expires 1994.
- Peter Donald Relic**, A.B. (Bowdoin), A.M. (Case Western Reserve), Ed.D. (Harvard). Elected Overseer, 1987. Term expires 1999.
- Linda Horvitz Roth**, A.B. (Bowdoin), M.A. (North Carolina). Elected Overseer, 1992. First term expires 1998.
- D. Ellen Shuman**, A.B. (Bowdoin), M.S. (Yale). Elected Overseer, 1992. First term expires 1998.
- Peter Metcalf Small**, A.B. (Bowdoin). Elected Overseer, 1988. First term expires 1994.
- Donald B. Snyder, Jr.**, A.B. (Bowdoin). Elected Overseer, 1992. First term expires 1998.
- Deborah Jean Swiss**, A.B. (Bowdoin), Ed.M., Ed.D. (Harvard). Elected Overseer, 1983. Term expires 1995.
- Mary Ann Villari**, A.B. (Bowdoin), J.D. (Boston University). Elected Overseer, 1987. Term expires 1999.
- William Grosvenor Wadman**. Elected Overseer, 1988. First term expires 1994.
- David Earl Warren**, A.B. (Bowdoin), J.D. (Columbia). Elected Overseer, 1988. First term expires 1994.
- Robert Francis White**, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1993. First term expires 1999.
- Russell Bacon Wight, Jr.**, A.B. (Bowdoin). Elected Overseer, 1987. Term expires 1999.
- Barry Neal Wish**, A.B. (Bowdoin). Elected Overseer, 1989. First term expires 1995.
- Elizabeth Christian Woodcock**, A.B. (Bowdoin), A.M. (Stanford), J.D. (Maine). Elected Overseer, 1985. Term expires 1997.

Donald Mack Zuckert, A.B. (Bowdoin), LL.B. (New York University). Elected Overseer, 1987. Term expires 1999.

OVERSEERS EMERITI

Charles William Allen, A.B. (Bowdoin), J.D. (Michigan), LL.D. (Bowdoin). Elected Overseer, 1967; elected emeritus, 1976.

Willard Bailey Arnold III, A.B. (Bowdoin), M.S. (New York University). Elected Overseer, 1970; elected emeritus, 1984.

Charles Manson Barbour, A.B. (Bowdoin), M.D., C.M. (McGill). Elected Overseer, 1960; elected emeritus, 1977.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury). Elected Secretary, 1977; elected secretary of the president and trustees and overseer emeritus, 1991.

Richard Kenneth Barksdale, A.B. (Bowdoin), A.M. (Syracuse), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.

Robert Ness Bass, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1964; elected emeritus, 1980.

Gerald Walter Blakeley, Jr., A.B. (Bowdoin). Elected Overseer, 1960; elected emeritus, 1976.

Matthew Davidson Branche, A.B. (Bowdoin), M.D. (Boston University). Elected Overseer, 1970; elected emeritus, 1985.

John Everett Cartland, Jr., A.B. (Bowdoin), M.D. (Columbia). Elected Overseer, 1976; elected emeritus, 1988.

Kenneth Irvine Chenault, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1986; elected emeritus, 1993.

Norman Paul Cohen, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1977; elected emeritus, 1989.

Honorable William Sebastian Cohen, A.B. (Bowdoin), LL.B. (Boston University), LL.D. (St. Joseph, Maine, Western New England, Bowdoin, Nasson). Elected Overseer, 1973; elected emeritus, 1985.

Reverend Richard Hill Downes, A.B. (Bowdoin), S.T.B. (General Theological Seminary). Elected Overseer, 1970; elected emeritus, 1983.

Oliver Farrar Emerson II, A.B. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.

William Francis Farley, A.B. (Bowdoin), J.D. (Boston College). Elected Overseer, 1980; elected emeritus, 1992.

Roy Anderson Foulke, B.S., A.M., LL.D. (Bowdoin). Elected Overseer, 1948; elected emeritus, 1973.

- Herbert Spencer French, Jr.**, A.B. (Bowdoin), M.B.A. (Pennsylvania). Elected Overseer, 1976; elected emeritus, 1988.
- Paul Edward Gardent, Jr.**, B.S. (Bowdoin). Elected Overseer, 1975; elected emeritus, 1987.
- Albert Edward Gibbons, Jr.**, A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.
- Jonathan Standish Green**, A.B. (Bowdoin), M.B.A. (California). Elected Overseer, 1975; elected emeritus, 1987.
- Nathan Ira Greene**, A.B. (Bowdoin). Elected Overseer, 1964; elected emeritus, 1980.
- Peter Francis Hayes**, A.B. (Bowdoin), B.A., M.A. (Oxford), A.M., M.Phil., Ph.D. (Yale). Elected Overseer, 1969; elected emeritus, 1983.
- Regina Elbinger Herzlinger**, B.S. (Massachusetts Institute of Technology), D.B.A. (Harvard). Elected Overseer, 1983; elected emerita, 1989.
- Reverend Judith Linnea Anderson Hoehler**, A.B. (Douglass), M.Div. (Harvard), S.T.D. (Starr King School for the Ministry). Elected Overseer, 1980; elected emerita, 1992.
- William Dunning Ireland, Jr.**, A.B. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.
- Lewis Wertheimer Kresch**, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1970; elected emeritus, 1983.
- Albert Frederick Lilley**, A.B. (Bowdoin), LL.B. (Virginia). Elected Overseer, 1976; elected emeritus, 1988.
- Herbert Mayhew Lord**, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1980; elected emeritus, 1992.
- Malcolm Elmer Morrell, Jr.**, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1974; elected emeritus, 1986.
- Robert Warren Morse**, B.S. (Bowdoin), Sc.M., Ph.D. (Brown), Sc.D. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.
- Norman Colman Nicholson, Jr.**, A.B. (Bowdoin). Elected Overseer, 1979; elected emeritus, 1991.
- John Thorne Perkin**, A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.
- Payson Stephen Perkins**, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.
- Robert Chamberlain Porter**, A.B. (Bowdoin), LL.B. (Pennsylvania), LL.D. (Bowdoin). Elected Overseer, 1975; elected emeritus, 1987.
- Thomas Prince Riley**, A.B. (Bowdoin). Elected Secretary, 1955; elected emeritus, 1983.

- Alden Hart Sawyer**, B.S., LL.D. (Bowdoin). Elected Overseer, 1954; elected Treasurer, 1967; elected emeritus, 1979.
- Alden Hart Sawyer, Jr.**, A.B. (Bowdoin), M.B.A. (Michigan). Elected Overseer, 1976; elected emeritus, 1985.
- Robert Nelson Smith**, Lieutenant General (Ret.), B.S. (Bowdoin), LL.D. (Kyung Hee University). Elected Overseer, 1965; elected emeritus, 1978.
- John Ingalls Snow**, A.B. (Bowdoin), M.B.A. (Wharton). Elected Overseer, 1986; elected emeritus, 1992.
- Phineas Sprague**, A.B. (Bowdoin). Elected Overseer, 1985; elected emeritus, 1992.
- Terry Douglas Stenberg**, A.B. (Bowdoin), Ed.M. (Boston University), Ph.D. (Minnesota). Elected Overseer, 1983; elected emeritus, 1993.
- Raymond Stanley Troubh**, A.B. (Bowdoin), LL.B. (Yale). Elected Overseer, 1978; elected emeritus, 1990.
- Lewis Vassor Vafiades**, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1973; elected emeritus, 1979.
- William David Verrill**, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.
- Timothy Matlack Warren**, A.B. (Bowdoin). Elected Overseer, 1985; elected emeritus, 1991.
- George Curtis Webber II**, A.B. (Bowdoin). Elected Secretary, 1983; elected emeritus, 1986.
- Honorable Donald Wedgwood Webber**, A.B. (Bowdoin), LL.B. (Harvard), L.H.D. (Bates, Defiance), LL.D. (Bowdoin, Maine). Elected Overseer, 1962; elected emeritus, 1979.
-
- Harry K. Warren**, A.B. (Pennsylvania), *Secretary*. Elected Secretary, 1986.

COMMITTEES OF THE BOARDS

Joint Standing Committees*

Academic Affairs Committee

Carolyn W. Slayman, *Chair*; Thomas H. Allen, Stanley F. Druckenmiller, Robert H. Edwards, Leon A. Gorman, Gordon F. Grimes, John F. Magee, Cynthia G. McFadden, Peter D. Relic, Linda H. Roth, one faculty member to be elected from the Faculty Affairs Committee, one faculty member to be elected from the Curriculum and Educational Policy Committee, Peter A. LaRaus '96, Hong Shen '94, Lesley M. Thomas '96 (*alternate*), Charles R. Beitz, *liaison officer*.

Admissions and Financial Aid

Laurie A. Hawkes, *Chair*; Philip R. Cowen, Robert H. Edwards, William H. Hazen, Dennis J. Hutchinson, Judith M. Isaacson, Hollis Rafkin-Sax, Peter D. Relic, Jean Sampson, Mary Ann Villari, Russell B. Wight, Jr., Robert R. Nunn (*faculty*), Sajjad M. Jaffer '95, Marc T. Jobin '96, Richard E. Steele, *liaison officer*.

Audit

Diane T. Lund, *Chair*; Theodore H. Brodie, J. Taylor Crandall, Leonard W. Cronkhite, Jr., John F. Magee, Robert F. White, Kent J. Chabotar, *liaison officer*.

Development

Donald M. Zuckert, *Chair*; Thomas C. Casey, Philip R. Cowen, Robert H. Edwards, Gordon F. Grimes, William H. Hazen, John R. Hupper, Samuel A. Ladd III, William G. Wadman, David E. Warren, Elizabeth C. Woodcock, Douglas C. Bates '66 (*alumni*), John L. Howland (*faculty*), Susan A. Kaplan (*faculty*), Christine M. Cappeto '94, Karin Stawarky '94, William A. Torrey, *liaison officer*.

Subcommittee on Campaign Planning

Frederick G. P. Thorne, *Chair*; Tracy J. Burlock, Philip R. Cowen, Stanley F. Druckenmiller, Robert H. Edwards, Marvin H. Green, Jr., Laurie A. Hawkes, William H. Hazen, C. Lee Herter, David A. Olsen, Russell B. Wight, Jr., Donald M. Zuckert, Merton G. Henry (*emeritus*), Richard Q. Armstrong (*alumni*), James W. MacAllen (*alumni*), Camille F. Sarrouf (*alumni*), Alexander H. Schilling, Jr. (*alumni*), William A. Torrey, *liaison officer*.

*The president of the College is *ex officio* a member of all standing committees, except the Audit Committee.

Executive

Paul P. Brountas, *Chair*; Rosalyne S. Bernstein, Robert H. Edwards, Frank J. Farrington, Marvin H. Green, Jr., Laurie A. Hawkes, Diane T. Lund, Richard A. Morrell, Campbell B. Niven, Carolyn W. Slayman, Barry N. Wish, Donald M. Zuckert, David M. Cohen '64 (*alumni*), Paul L. Nyhus (*faculty*), one student, Peter B. Webster (*secretary*).

Financial Planning

Campbell B. Niven, *Chair*; Tracy J. Burlock, J. Taylor Crandall, Leonard W. Cronkhite, Jr., Robert H. Edwards, Donald R. Kurtz, G. Calvin Mackenzie, Richard A. Morrell, David A. Olsen, David E. Warren, Robert L. Morrell '47 (*alumni*), R. Wells Johnson (*faculty*), David J. Vail (*faculty*), James A. Hale '94, G. Jessica Keramas '96, Lewis P. Fickett '96 (*alternate*), Kent J. Chabotar, *liaison officer*.

Honors

Marvin H. Green, Jr., *Chair*; David P. Becker, Rosalyne S. Bernstein, George H. Butcher III, Robert H. Edwards, Dennis J. Hutchinson, G. Calvin Mackenzie, Carolyn W. Slayman, Mark C. Wethli (*faculty*), Janet A. Beales '96; Richard A. Mersereau and William A. Torrey, *liaison officers*.

Investments

Barry N. Wish, *Chair*; George H. Butcher III, Peter F. Drake, Stanley F. Druckenmiller, Robert H. Edwards, John R. Hupper, D. Ellen Shuman, Frederick G. P. Thorne, Russell B. Wight, Jr., Marvin H. Green, Jr. (*ex officio*), David S. Page (*faculty*), James A. Hale '94, Lewis P. Fickett '95 (*alternate*), Kent J. Chabotar, *liaison officer*.

Subcommittee on Social Responsibility

David P. Becker, *Chair*; Rosalyne S. Bernstein, Judith M. Isaacson, Donald R. Kurtz, Mary Ann Villari, Stephen T. Fisk (*faculty*), Lawrence H. Simon (*faculty*), one student, one student alternate, Kent J. Chabotar, *liaison officer*.

Nominating

Frank J. Farrington, *Chair*; Tracy J. Burlock, Robert H. Edwards, John R. Hupper, Frederick G. P. Thorne, Donald M. Zuckert, one alumni representative, Christian P. Potholm (*faculty*), John A. E. Ghanotakis '94; Richard A. Mersereau and William A. Torrey, *liaison officers*.

Physical Plant

Richard A. Morrell, *Chair*; Leonard W. Cronkhite, Jr., Robert H. Edwards, K. David Hancock, C. Lee Herter, Campbell B. Niven, L. Robert Porteous, Peter M. Small, Deborah J. Swiss, A. Myrick Freeman (*faculty*), Katharine J. Watson (*faculty*), Derek J. Benner '94, one student, Kent J. Chabotar, *liaison officer*.

Student Affairs

Rosalyn S. Bernstein, *Chair*; Walter E. Bartlett, David P. Becker, Robert H. Edwards, Dennis J. Hutchinson, Michael H. Owens, Jean Sampson, Donald B. Snyder, Jr., Robert F. White, Elizabeth C. Woodcock, Sarah F. McMahon (*faculty*), Nathaniel T. Wheelwright (*faculty*), Joshua I. Klein '94, Craig E. Strauss '96, Kristin M. Duesel '94 (*alternate*), Elizabeth Chadwick, *liaison officer*.

Subcommittee on Minority Affairs

C. Lee Herter, *Chair*; Thomas C. Casey, Frank J. Farrington, G. Calvin Mackenzie, Peter D. Relic, Jean Sampson, Daniel Levine (*faculty*), Yongyai Darayen Berry '96, Raissa A. J. Maynard '96; Elizabeth Chadwick and Betty C. Thompson, *liaison officers*.

Staff Liaison to the Governing Boards: Richard A. Mersereau

Secretary, President and Trustees: Robert H. Millar

Secretary, Overseers: Harry K. Warren

FACULTY REPRESENTATIVES

Trustees: Paul L. Nyhus (1994) and one faculty member to be elected by the Faculty Affairs Committee in September.

Overseers: Craig A. McEwen (1995), David J. Vail (1995), and one faculty member to be elected by the Curriculum and Educational Policy Committee in September.

STUDENT REPRESENTATIVES

Executive Committee: One student to be appointed.

Trustees: Christian J. Sweeney '94 and one student to be appointed.

Overseers: Donald H. Hunter '96 and two students to be appointed.

ALUMNI COUNCIL REPRESENTATIVES

Executive Committee: David M. Cohen '64.

Trustees: David M. Cohen '64 and Mary Hoagland King '80.

Overseers: Iris W. Davis '78 and one alumni representative to be appointed.

Officers of Instruction

Robert Hazard Edwards, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Carleton), President of the College. (1990)*

Philip Conway Beam, A.B., A.M., Ph.D. (Harvard), Henry Johnson Professor of Art and Archaeology Emeritus. (1936)

Ray Stuart Bicknell, B.S., M.S. (Springfield), Coach in the Department of Athletics Emeritus. (1962)

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack), President of the College Emeritus. (1952)

Edward Joseph Geary, A.B. (Maine), A.M., Ph.D. (Columbia), hon. A.M. (Harvard), Henry Wadsworth Longfellow Professor of Romance Languages Emeritus. (1965)

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D.Litt. (Wesleyan), L.H.D. (Colby), L.H.D. (Bowdoin), L.H.D. (Bates), President of the College and Professor of English Emeritus. (1952)

Lawrence Sargent Hall, A.B. (Bowdoin), A.M., Ph.D. (Yale), Henry Leland Chapman Professor of English Literature Emeritus. (1946)

Paul Vernon Hazelton, B.S. (Bowdoin), Ed.M. (Harvard), Professor of Education Emeritus. (1948)

Ernst Christian Helmreich, A.B. (Illinois), A.M., Ph.D. (Harvard), Thomas Brackett Reed Professor of History and Political Science Emeritus. (1931)

Charles Ellsworth Huntington, B.A., Ph.D. (Yale), Professor of Biology Emeritus and Director of the Bowdoin Scientific Station at Kent Island Emeritus. (1953)

Myron Alton Jeppesen, B.S. (Idaho), M.S., Ph.D. (Pennsylvania State), Professor of Physics and Josiah Little Professor of Natural Science Emeritus. (1936)

Barbara Jeanne Kaster, A.B. (Texas Western), M.Ed. (Texas-El Paso), Ph.D. (Texas-Austin), Harrison King McCann Professor of Oral Communication in the Department of English Emerita. (1973)

Elroy Osborne LaCase, Jr., A.B. (Bowdoin), A.M. (Harvard), Ph.D. (Brown), Professor of Physics Emeritus. (1947)

*Date of first appointment to the faculty.

- Mortimer Ferris LaPointe**, B.S. (Trinity), M.A.L.S. (Wesleyan), Coach in the Department of Athletics Emeritus. (1969)
- Sally Smith LaPointe**, B.S.Ed. (Southern Maine), Coach in the Department of Athletics Emerita. (1973)
- James Spencer Lentz**, A.B. (Gettysburg), A.M. (Columbia), Coordinator of Physical Education and the Outing Club Emeritus. (1968)
- Charles Douglas McGee**, B.S., A.M. (Northwestern), Ph.D. (Harvard), Professor of Philosophy Emeritus. (1963)
- Edward Thomas Reid**, Coach in the Department of Athletics Emeritus. (1969)
- John Cornelius Rensenbrink**, A.B. (Calvin), A.M. (Michigan), Ph.D. (Chicago), Professor of Government Emeritus. (1961)
- Matilda White Riley**, A.B., A.M. (Radcliffe), Sc.D. (Bowdoin), Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita. (1973)
- Abram Raymond Rutan**, A.B. (Bowdoin), M.F.A. (Yale), Director of Theater Emeritus. (1955)
- William Davis Shipman**, A.B. (Washington), A.M. (California-Berkeley), Ph.D. (Columbia), Adams-Catlin Professor of Economics Emeritus. (1957)
- William Bolling Whiteside**, A.B. (Amherst), A.M., Ph.D. (Harvard), Frank Munsey Professor of History Emeritus. (1953)
-
- John William Ambrose, Jr.**, A.B., A.M., Ph.D. (Brown), Joseph Edward Merrill Professor of Greek Language and Literature. (1966)
- Anthony Frederick Antolini**, A.B. (Bowdoin), M.A., M.A., Ph.D. (Stanford), Director of Bowdoin Chorus. (*Adjunct.*)
- Shaheen Ayubi**, A.B. (St. Joseph College, Karachi), A.M. (University of Karachi), Ph.D. (Pennsylvania), Assistant Professor of Government. (1988)
- Marie E. Barbieri**, B.A., M.S., M.A., Ph.D. (Pennsylvania), Assistant Professor of Romance Languages. (1993)
- William Henry Barker**, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Professor of Mathematics. (1975)
- Charles R. Beitz**, A.B. (Colgate), M.A. (Michigan), M.A., Ph.D. (Princeton), Dean for Academic Affairs and Professor of Government. (1991)
- Susan Elizabeth Bell**, A.B. (Haverford), A.M., Ph.D. (Brandeis), Associate Professor of Sociology. (1983)
- Christine A. Blaine**, B.A. (Saint Benedict), Visiting Instructor in Chemistry. (1993)

- John H. Blitz**, B.A. (Alabama), M.S. (Southern Mississippi), Ph.D. (City University of New York), Visiting Assistant Professor of Anthropology. (1992)
- Barbara Weiden Boyd**, A.B. (Manhattanville), A.M., Ph.D. (Michigan), Associate Professor of Classics. (1980)
- Richard Dale Broene**, B.S. (Hope), Ph.D. (California–Los Angeles), Assistant Professor of Chemistry. (1993)
- Susan Agnes Burggraf**, B.A. (Rosemont), M.A. (Bryn Mawr), Visiting Instructor of Psychology. (1993)
- Franklin Gorham Burroughs, Jr.**, A.B. (University of the South), A.M., Ph.D. (Harvard), Professor of English. (1968)
- Nefertiti Burton**, B.A. (Clark), Visiting Instructor in Theater. (1993)
- Samuel Shipp Butcher**, A.B. (Albion), A.M., Ph.D. (Harvard), Professor of Chemistry. (1964)
- Charles Joseph Butt**, B.S., M.S. (Springfield), Coach in the Department of Athletics. (1961)
- Helen Louise Cafferty**, A.B. (Bowling Green), A.M. (Syracuse), Ph.D. (Michigan), William R. Kenan, Jr., Professor of German and the Humanities. (*On leave of absence for the fall semester.*) (1972)
- John Calabrese**, B.A. (Georgetown), M.A. (New York), Ph.D. (London School of Economics), Visiting Assistant Professor of Government. (1991)
- Steven Roy Cerf**, A.B. (Queens College), M.Ph., Ph.D. (Yale), George Lincoln Skolfield, Jr., Professor of German. (1971)
- Kent John Chabotar**, B.A. (St. Francis College), M.P.A., Ph.D. (Syracuse), Vice President for Finance and Administration and Treasurer and Senior Lecturer in Government. (1991)
- Elizabeth Chadwick**, A.B. (Bryn Mawr), Ph.D. (Yale), Dean of the College and Senior Lecturer in English.
- Ronald L. Christensen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Professor of Chemistry. (1976)
- Carol E. Cohn**, B.A. (Michigan), Ph.D. (The Union Graduate School), Assistant Professor of Sociology and Women's Studies. (1993)
- David Collings**, A.B. (Pacific Union), A.M. (California-Riverside), Ph.D. (California-Riverside), A. LeRoy Greason Assistant Professor of English. (1987)
- Rachel Ex Connelly**, A.B. (Brandeis), A.M., Ph.D. (Michigan), Associate Professor of Economics. (*On leave of absence for the fall semester.*) (1985)
- Denis Joseph Corish**, B.Ph., B.A., L.Ph. (Maynooth College, Ireland), A.M. (University College, Dublin), Ph.D. (Boston University), Professor of Philosophy. (1973)

- Thomas Browne Cornell**, A.B. (Amherst), Professor of Art. (1962)
- John D. Cullen**, A.B. (Brown), Assistant Director of Athletics and Coach in the Department of Athletics. (1985)
- Gregory Paul DeCoster**, B.S. (Tulsa), Ph.D. (Texas), Associate Professor of Economics. (1985)
- Deborah S. DeGraff**, B.A. (Knox College), M.A., Ph.D. (Michigan), Assistant Professor of Economics. (1991)
- Gunapala Dharmasiri**, B.A. (University of Ceylon), Ph.D. (University of Lancaster), Visiting Associate Professor of Religion. (1993)
- Sara A. Dickey**, B.A. (Washington), M.A., Ph.D. (California-San Diego), Assistant Professor of Anthropology. (1988)
- Patsy S. Dickinson**, A.B. (Pomona), M.S., Ph.D. (Washington), Associate Professor of Biology. (1983)
- Joanne Feit Diehl**, A.B. (Mount Holyoke College), Ph.D. (Yale), Henry Hill Pierce Professor of English. (1988)
- Karin Dillman**, A.B. (Pedagogische Akademie), M.A. (University of San Diego), Ph.D. (California-San Diego), Assistant Professor of Romance Languages. (1987)
- Linda J. Docherty**, A.B. (Cornell), A.M. (Chicago), Ph.D. (North Carolina), Associate Professor of Art History. (1986)
- Guy T. Emery**, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Professor of Physics. (1988)
- Stephen Thomas Fisk**, A.B. (California-Berkeley), A.M., Ph.D. (Harvard), Professor of Mathematics. (1977)
- John M. Fitzgerald**, A.B. (Montana), M.S., Ph.D. (Wisconsin), Associate Professor of Economics. (1983)
- Maureen E. Flaherty**, A.B. (Williams), Coach in the Department of Athletics. (1992)
- Paul N. Franco**, B.A. (Colorado College), M.Sc. (London School of Economics), Ph.D. (Chicago), Assistant Professor of Government. (*On leave of absence for the academic year.*) (1990)
- Albert Myrick Freeman III**, A.B. (Cornell), A.M., Ph.D. (Washington), Professor of Economics. (1965)
- Alfred Herman Fuchs**, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Professor of Psychology. (1962)
- Matthew M. Gardner, Jr.**, B.A. (Yale), M.A. (Johns Hopkins), Lecturer in History. (*Adjunct.*) (*Fall semester.*)
- David K. Garnick**, B.A., M.S. (Vermont), Ph.D. (Delaware), Assistant Professor of Computer Science. (1988)

- William Davidson Geoghegan**, A.B. (Yale), M. Div. (Drew), Ph.D. (Columbia), Research Professor of Religion. (1954)
- Timothy J. Gilbride**, A.B. (Providence), M.P. (American International), Coach in the Department of Athletics. (1985)
- Edward Smith Gilfillan III**, A.B. (Yale), M.Sc., Ph.D. (British Columbia), Adjunct Professor of Chemistry and Lecturer in the Environmental Studies Program.
- Jane C. Girdham**, B.Mus. (Edinburgh), M.A. (University College, Cardiff, Wales), Ph.D. (Pennsylvania), Assistant Professor of Music. (1989)
- Christopher C. Glass**, A.B. (Haverford), M.Arch. (Yale), Visiting Lecturer in Art. (*Adjunct.*) (*Spring semester.*)
- Jonathan Paul Goldstein**, A.B. (New York–Buffalo), A.M., Ph.D. (Massachusetts), Associate Professor of Economics. (1979)
- Celeste Goodridge**, A.B. (George Washington), A.M. (William and Mary), Ph.D. (Rutgers), Associate Professor of English. (1986)
- Robert Kim Greenlee**, B.M., M.M. (Oklahoma), D.M. (Indiana), Associate Professor of Music. (1982)
- Charles Alfred Grobe, Jr.**, B.S., M.S., Ph.D. (Michigan), Professor of Mathematics. (1964)
- Stephen A. Hall**, B.A. (Corpus Christi College, Oxford), M.Phil. (Warburg Institute, London University), M.A. (Princeton), Instructor in Classics. (1989)
- Paul D. Halliday**, B.A. (Wesleyan), M.A. (Chicago), Visiting Instructor of History. (1993)
- Daniel R. Hammond**, B.S. (U.S. Military Academy at West Point), M.P.A. (Golden Gate), Coach in the Department of Athletics. (1993)
- Takahiko Hayashi**, B.A. (Rikkyo University), M.E.S. (University of Tsukuba), Lecturer in Japanese. (1991)
- Barbara S. Held**, A.B. (Douglass), Ph.D. (Nebraska), Professor of Psychology. (*On leave of absence for the fall semester.*) (1979)
- Mark Hine**, B.A. (Southern Maine), M.A. (California–San Diego), Visiting Instructor in Physics. (1992)
- James Lee Hodge**, A.B. (Tufts), A.M., Ph.D. (Pennsylvania State), George Taylor Files Professor of Modern Languages and Professor of German. (1961)
- John Clifford Holt**, A.B. (Gustavus Adolphus), A.M. (Graduate Theological Union), Ph.D. (Chicago), Professor of Religion. (*On leave of absence for the academic year.*) (1978)
- John LaFollette Howland**, A.B. (Bowdoin), Ph.D. (Harvard), Josiah Little Professor of Natural Science and Professor of Biology and Biochemistry. (1963)

- Arthur Mekeel Hussey II**, B.S. (Pennsylvania State), Ph.D. (Illinois), Professor of Geology. (*On leave of absence for the fall semester.*) (1961)
- Takako Ishida**, B.A., M.A. (Hiroshima University), Visiting Lecturer in Japanese. (*Adjunct.*)
- Janice Ann Jaffe**, A.B. (University of the South), A.M., Ph.D. (Wisconsin), Assistant Professor of Romance Languages. (*On leave of absence for the academic year.*) (1988)
- Amy S. Johnson**, B.A. (California-Los Angeles), Ph.D. (California-Berkeley), James R. and Helen Lee Billingsley Assistant Professor of Marine Biology. (1989)
- Robert Wells Johnson**, A.B. (Amherst), M.S., Ph.D. (Massachusetts Institute of Technology), Isaac Henry Wing Professor of Mathematics. (1964)
- Louis Dorrance Johnston**, B.S. (Minnesota), M.A., Ph.D. (California-Berkeley), Assistant Professor of Economics. (*On leave of absence for the academic year.*) (1990)
- Gwyneth Jones**, Teaching Fellow in Dance Performance. (*Adjunct.*)
- Michael Jones**, A.B. (Williams), Ph.D. (Yale), Associate Professor of Economics. (*On leave of absence for the academic year.*) (1987)
- Susan Ann Kaplan**, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Associate Professor of Anthropology and Director of the Peary-MacMillan Arctic Museum and Arctic Studies Center. (1985)
- John Michael Karl**, A.B., A.M., Ph.D. (Harvard), Associate Professor of History. (*On leave of absence for the academic year.*) (1968)
- Alissa G. Kerry**, B.A. (Anderson), M.A. (Michigan State), Head Trainer in the Department of Athletics. (1993)
- Ann Louise Kibbie**, B.A. (Boston), Ph.D. (California-Berkeley), Assistant Professor of English. (1989)
- Robert J. Knapp**, B.A. (Pomona), Ph.D. (New York), Assistant Professor of Mathematics. (1991)
- Jane Elizabeth Knox-Voina**, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas-Austin), Professor of Russian. (1976)
- Nancy G. Kravit**, A.B. (Columbia), M.S. (Massachusetts Institute of Technology), Ph.D. (Connecticut), Adjunct Assistant Professor of Biology.
- Daniel D. Kurylo**, B.A. (Colorado), M.A., Ph.D. (Northeastern), Visiting Assistant Professor of Psychology. (1993)
- Edward Paul Laine**, A.B. (Wesleyan), Ph.D. (Woods Hole and Massachusetts Institute of Technology), Associate Professor of Geology and Director of the Environmental Studies Program. (1985)
- Peter D. Lea**, A.B. (Dartmouth), M.S. (Washington), Ph.D. (Colorado-Boulder), Assistant Professor of Geology. (1988)

- Ellen C. Leichtman**, B.A. (Queens), M.A. (Hunter), Ph.D. (Brown), Visiting Assistant Professor of Music. (1993)
- Daniel Levine**, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science. (1963)
- Kenneth Adell Lewallen**, B.S. (Texas A&M), M.A., Ph.D. (Kansas State), Dean of Students and Senior Lecturer in History. (1986)
- Mike Linkovich**, A.B. (Davis and Elkins), Trainer in the Department of Athletics. (1954)
- Joseph David Litvak**, A.B. (Wesleyan), M.Phil., Ph.D. (Yale), Associate Professor of English. (1982)
- Ann Akimi Lofquist**, B.F.A. (Washington University, St. Louis), M.F.A. (Indiana), Assistant Professor of Art. (1990)
- Burke O'Connor Long**, A.B. (Randolph-Macon), B.D., A.M., Ph.D. (Yale), Professor of Religion. (1968)
- Suzanne B. Lovett**, A.B. (Bowdoin), Ph.D. (Stanford), Assistant Professor of Psychology. (*On leave of absence for the spring semester.*) (1990)
- Larry D. Lutchmansingh**, A.B. (McGill), A.M. (Chicago), Ph.D. (Cornell), Associate Professor of Art History. (1974)
- Irena S. M. Makarushka**, B.A. (St. John's), M.A., Ph.D. (Boston), Assistant Professor of Religion. (1990)
- François Manchuelle**, M.A. (University of Paris, Sorbonne), Ph.D. (California–Santa Barbara), Visiting Assistant Professor of History. (1993)
- Celeste Dolores Mann**, B.A. (Yale), M.A. (University of Iowa), Consortium for a Strong Minority Presence at Liberal Arts Colleges Scholar-in-Residence and Lecturer in Romance Languages. (*Adjunct.*)
- Janet C. Marstine**, B.S. (Lehigh), M.A. (Minnesota), Ph.D. (Pittsburgh), Visiting Assistant Professor of Art.
- Janet Marie Martin**, A.B. (Marquette), A.M., Ph.D. (Ohio State), Associate Professor of Government. (1986)
- Theodora Penny Martin**, A.B. (Middlebury), M.A.T. (Harvard), A.M. (Middlebury), Ed.D. (Harvard), Assistant Professor of Education. (1988)
- Dana Walker Mayo**, B.S. (Massachusetts Institute of Technology), Ph.D. (Indiana), Charles Weston Pickard Research Professor of Chemistry. (1962)
- O. Jeanne d'Arc Mayo**, B.S., M.Ed. (Boston), Physical Therapist and Associate Trainer in the Department of Athletics. (1978)
- Thomas E. McCabe, Jr.**, B.S., M.S. (Springfield College), Coach in the Department of Athletics. (1990)

- James Wesley McCalla**, B.A., B.M. (Kansas), M.M. (New England Conservatory), Ph.D. (California-Berkeley), Associate Professor of Music. (1985)
- Daniel McCusker**, Visiting Lecturer in Dance. (*Adjunct.*)
- Craig Arnold McEwen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Daniel B. Fayerweather Professor of Political Economy and Sociology. (1975)
- Robert J. McIntyre**, B.A. (Grinnell), M.P.A. (Cornell), Ph.D. (North Carolina-Chapel Hill), Visiting Associate Professor of Economics.
- John McKee**, A.B. (Dartmouth), A.M. (Princeton), Associate Professor of Art. (1962)
- Sarah Francis McMahon**, A.B. (Wellesley), Ph.D. (Brandeis), Associate Professor of History and Director of the Women's Studies Program. (1982)
- Terry Meagher**, A.B. (Boston), M.S. (Illinois State), Coach in the Department of Athletics. (1983)
- Raymond H. Miller**, A.B. (Indiana), A.M., Ph.D. (Harvard), Associate Professor of Russian. (1983)
- Richard Ernest Morgan**, A.B. (Bowdoin), A.M., Ph.D. (Columbia), William Nelson Cromwell Professor of Constitutional and International Law and Government. (1969)
- John Morneau**, B.M. (New Hampshire), Director of Concert Band. (*Adjunct.*)
- Elizabeth Muther**, B.A. (Wellesley), Ph.D. (California-Berkeley), Visiting Assistant Professor of English. (1993)
- Stephen G. Naculich**, B.S. (Case Western Reserve), M.A., Ph.D. (Princeton), Assistant Professor of Physics. (1993)
- Jeffrey Karl Nagle**, A.B. (Earlham), Ph.D. (North Carolina), Professor of Chemistry. (*On leave of absence for the academic year.*) (1980)
- Robert Raymond Nunn**, A.B. (Rutgers), A.M. (Middlebury), Ph.D. (Columbia), Associate Professor of Romance Languages. (1959)
- Paul Luther Nyhus**, A.B. (Augsburg), S.T.B., Ph.D. (Harvard), Frank Andrew Munsey Professor of History. (1966)
- Kathleen Ann O'Connor**, A.B. (Dartmouth), A.M., Ph.D. (Virginia), Assistant Professor of German. (*Fall semester.*) (1987)
- Clifton Cooper Olds**, A.B. (Dartmouth), A.M., Ph.D. (Pennsylvania), Edith Cleaves Barry Professor of the History and Criticism of Art. (*On leave of absence for the spring semester.*) (1982)
- Andreas Ortman**, B.A. (University of Bielefeld, Germany), M.A. (Georgia), Ph.D. (Texas A&M), Assistant Professor of Economics. (1991)
- David Sanborn Page**, B.S. (Brown), Ph.D. (Purdue), Professor of Chemistry and Biochemistry. (1974)

- Sharon L. Pedersen**, A.B. (Harvard and Radcliffe), A.M., Ph.D. (Pennsylvania), Assistant Professor of Mathematics. (1991)
- Rosa Pellegrini**, Diploma Magistrale (Istituto Magistrale "Imbriani" Avellino), Lecturer in Italian. (*Adjunct.*)
- Carey Richard Phillips**, B.S. (Oregon State), M.S. (California-Santa Barbara), Ph.D. (Wisconsin-Madison), Associate Professor of Biology. (1985)
- Edward Pols**, A.B., A.M., Ph.D. (Harvard), Research Professor of Philosophy and the Humanities. (1949)
- Christian Peter Potholm II**, A.B. (Bowdoin), M.A., M.L.D., Ph.D. (Tufts), DeAlva Stanwood Alexander Professor of Government. (1970)
- Lance Arthur Ramshaw**, B.A. (Oberlin), M.Div. (Episcopal Divinity School), M.S., Ph.D. (Delaware-Newark), Assistant Professor of Computer Science. (*On leave of absence for the academic year.*) (1990)
- James Daniel Redwine, Jr.**, A.B. (Duke), A.M. (Columbia), Ph.D. (Princeton), Edward Little Professor of the English Language and Literature. (1963)
- Marilyn Reizbaum**, A.B. (Queens College), M.Litt. (Edinburgh), Ph.D. (Wisconsin-Madison), Associate Professor of English. (1984)
- Evan D. Richert**, B.A., M.A. (Syracuse), Visiting Lecturer in the Environmental Studies Program. (*Adjunct.*) (*Spring semester.*)
- Nancy Elizabeth Riley**, B.A. (Pennsylvania), M.P.H., M.A. (Hawaii), Ph.D. (Johns Hopkins), Assistant Professor of Sociology. (1992)
- Jonathan W. Robbins**, B.A. (Brown), Associate in Education. (*Adjunct.*)
- Rosemary Anne Roberts**, B.A. (University of Reading), M.Sc., Ph.D. (University of Waterloo), Associate Professor of Mathematics. (1984)
- Michael Paul Roderick**, A.B. (Maine), Technical Director in the Department of Theater Arts. (*Adjunct.*)
- Guenter Herbert Rose**, B.S. (Tufts), M.S. (Brown), Ph.D. (California-Los Angeles), Associate Professor of Psychology and Psychobiology. (*On leave of absence for the spring semester.*) (1976)
- Daniel Walter Rossides**, B.A., Ph.D. (Columbia), Professor of Sociology. (1968)
- Lynn Margaret Ruddy**, B.S. (Wisconsin-Oshkosh), Assistant Director of Athletics and Coach in the Department of Athletics. (1976)
- John Santos**, B.A. (Knox), M.S., Ph.D. (Illinois), Visiting Assistant Professor of Economics. (1993)
- Paul Sarvis**, Teaching Fellow in Dance Performance. (*Adjunct.*)
- Paul Eugene Schaffner**, A.B. (Oberlin), Ph.D. (Cornell), Associate Professor of Psychology. (1977)

- Raffael Marcus Scheck**, Lizentiat/M.A. (Universität Zürich), Ph.D. (Brandeis), Visiting Assistant Professor in History. (1993)
- Elliott Shelling Schwartz**, A.B., A.M., Ed.D. (Columbia), Professor of Music. (*On leave of absence for the academic year.*) (1964)
- Scott R. Schon**, B.A. (Harvard), M.A. (Princeton), Visiting Instructor of Philosophy. (1993)
- Bereket Habte Selassie**, LL.B., Ph.D. (University of London), Visiting Professor of History on the Tallman Foundation. (*Fall semester.*) (1993)
- Carl Thomas Settlemyre**, B.S., M.S. (Ohio State), Ph.D. (North Carolina State), Associate Professor of Biology and Chemistry. (1969)
- Harvey Paul Shapiro**, B.S. (Connecticut), M.Ed. (Springfield), Coach in the Department of Athletics. (1983)
- Norean Radke Sharpe**, B.A. (Mount Holyoke), M.S. (North Carolina-Chapel Hill), Ph.D. (Virginia), Assistant Professor of Mathematics. (1989)
- Marie-Jospehe Silver**, B.A. (University of Aix-en-Provence), M.Ed. (Maine-Orono), Visiting Lecturer in Romance Languages. (*Fall semester.*) (1992)
- Lawrence Hugh Simon**, A.B. (Pennsylvania), A.B. (Oxford), M.A./B.A. (Cambridge), Ph.D. (Boston University), Associate Professor of Philosophy. (1987)
- Peter Slovenski**, A.B. (Dartmouth), A.M. (Stanford), Coach in the Department of Athletics. (1987)
- Melinda Yowell Small**, B.S., A.M. (St. Lawrence), Ph.D. (Iowa), Associate Professor of Psychology. (1972)
- David Neel Smith**, A.B. (Harvard), A.M., Ph.D. (California-Berkeley), Assistant Professor of Archaeology. (1987)
- G. E. Kidder Smith, Jr.**, A.B. (Princeton), Ph.D. (California-Berkeley), Associate Professor of History and Director of the Asian Studies Program. (1981)
- Deborah A. Soifer**, B.A. (George Washington), M.A., Ph.D. (Divinity School-Chicago), Visiting Assistant Professor of Religion. (1992)
- Philip Hilton Soule**, A.B. (Maine), Coach in the Department of Athletics. (1967)
- Allen Lawrence Springer**, A.B. (Amherst), M.A., M.A.L.D., Ph.D. (Tufts), Associate Professor of Government. (1976)
- Randolph Stakeman**, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Associate Dean for Academic Affairs, Director of the Africana Studies Program, and Associate Professor of History. (1978)
- William Lee Steinhart**, A.B. (Pennsylvania), Ph.D. (Johns Hopkins), Professor of Biology. (1975)

- Elizabeth A. Stemmler**, B.S. (Bates), Ph.D. (Indiana), Assistant Professor of Chemistry. (1988)
- Matthew Stuart**, B.A. (Vermont), M.A. (Cornell), Instructor in Philosophy. (1993)
- Françoise Dupuy Sullivan**, Maîtrise (Université de Bordeaux), M.A. (Washington, Seattle), Ph.D. (California-Irvine), Associate Professor of Romance Languages. (*On leave of absence for the academic year.*) (1985)
- Dale Syphers**, B.S., M.Sc. (Massachusetts), Ph.D. (Brown), Associate Professor of Physics. (1986)
- Susan L. Tananbaum**, B.A. (Trinity), M.A., M.A., Ph.D. (Brandeis), Assistant Professor of History. (*On leave of absence for the academic year.*) (1990)
- Clifford Ray Thompson, Jr.**, A.B., A.M., Ph.D. (Harvard), Professor of Romance Languages. (*On leave of absence for the spring semester.*) (1961)
- Allen B. Tucker, Jr.**, A.B. (Wesleyan), M.S., Ph.D. (Northwestern), Professor of Computer Science. (1988)
- James Henry Turner**, A.B. (Bowdoin), B.S., M.S., Ph.D. (Massachusetts Institute of Technology), Associate Professor of Physics. (1964)
- John Harold Turner**, A.M. (St. Andrews, Scotland), A.M. (Indiana), Ph.D. (Harvard), Professor of Romance Languages. (1971)
- David Jeremiah Vail**, A.B. (Princeton), M.A., M.Phil., Ph.D. (Yale), Adams-Catlin Professor of Economics. (*On leave of absence for the spring semester.*) (1970)
- June Adler Vail**, A.B. (Connecticut), M.A.L.S. (Wesleyan), Associate Professor of Dance and Director of Dance. (*On leave of absence for the spring semester.*) (1987)
- Howard S. Vandersea**, A.B. (Bates), M.Ed. (Boston), Coach in the Department of Athletics. (1984)
- William Chace VanderWolk**, A.B. (North Carolina), A.M. (Middlebury), Ph.D. (North Carolina), Associate Professor of Romance Languages. (1984)
- James Edward Ward III**, A.B. (Vanderbilt), A.M., Ph.D. (Virginia), Professor of Mathematics. (1968)
- Sidney John Watson, B.S.** (Northeastern), Ashmead White Director of Athletics. (1958)
- William Collins Watterson**, A.B. (Kenyon), Ph.D. (Brown), Professor of English. (1976)
- Susan Elizabeth Wegner**, A.B. (Wisconsin-Madison), A.M., Ph.D. (Bryn Mawr), Associate Professor of Art History. (1980)

- Marcia Anne Weigle**, A.B., A.M., Ph.D. (Notre Dame), Assistant Professor of Government. (1988)
- Allen Wells**, A.B. (SUNY-Binghamton), A.M., Ph.D. (SUNY-Stony Brook), Professor of History. (1988)
- Patricia A. Welsch**, B.A. (Fordham), M.A., Ph.D. (Virginia), Assistant Professor of Film Studies. (1993)
- Xiaohong Wen**, B.A. (Peking Languages Institute, Beijing), M.A., Ph.D. (Kansas-Lawrence), Assistant Professor of Chinese. (1991)
- David Philip West, Jr.**, B.S. (Appalachian State), M.S. (Maine-Orono), Visiting Instructor in Geology. (*Fall semester.*) (1993)
- Mark Christian Wethli**, B.F.A., M.F.A. (University of Miami), Professor of Art. (1985)
- Nathaniel Thoreau Wheelwright**, B.S. (Yale), Ph.D. (Washington), Associate Professor of Biology. (1986)
- D. Michael Woodruff**, A.B. (Bowdoin), Director of Outing Club and Coach in the Department of Athletics. (1993)
- Jean Yarbrough**, A.B. (Cedar Crest College), A.M., Ph.D. (New School for Social Research), Professor of Government. (1988)

COMMITTEES OF THE FACULTY

Robert R. Nunn, *Faculty Clerk***Academic Computing Center**

Allen B. Tucker, Jr., *Chair*; the Manager of the Computing Center, Stephen T. Fisk, Judith R. Montgomery, Andreas Ortmann, and D. Neel Smith. *Undergraduates*: Elizabeth M. Dahm '94 and Ching-Ping Lin '95.

Administrative

The President, *Chair*; the Dean of the College, the Dean of Students, Charles A. Grobe, Jr., Jane E. Knox-Voina, Lawrence H. Simon, and Melinda Y. Small. *Undergraduates*: V. Lauren Deneka '95, Daniel K. Huecker '95, and Craig E. Strauss '96.

Admissions and Financial Aid

Jean M. Yarbrough, *Chair*; the Dean of Admissions, the Dean of the College, the Director of Student Aid, John W. Ambrose, Jr., Shaheen Ayubi, Alfred H. Fuchs, James D. Redwine, and C. Thomas Settlemire. *Undergraduates*: Sarah E. Kurz '96 and Michelle Li '96. *Alternate*: Warren M. Durbin '96.

Africana Studies

Daniel Levine, *Chair*; the Director of the Africana Studies Program, the Assistant to the President for Multicultural Programs, James L. Hodge, Celeste Goodridge, James W. McCalla, and Craig A. McEwen. *Undergraduates*: Christine A. Copeland '96, Natasha J. Padilla '94, and three others to be named.

Asian Studies

Kidder Smith, *Chair*; Sara A. Dickey, Takahiko Hayashi, Nancy E. Riley, Deborah Soifer, and Xiaohong Wen. *Undergraduates*: Yongyai Darayen Berry '96 and Tracy S. Boulter '94.

Athletics

James E. Ward, *Chair*; the Dean of the College, the Director of Athletics, Denis J. Corish, Celeste Goodridge, Richard E. Morgan, and Lynn M. Ruddy. *Undergraduates*: Patrick M. Callahan '95 and Christopher B. Ledwick '95. One alternate to be named.

Committee of Five

Craig A. McEwen, Paul L. Nyhus, David J. Vail, one representative from the Curriculum and Educational Policy Committee, and one representative from the Faculty Affairs Committee.

Committee on Committees

Dale A. Syphers, *Chair*; the Dean for Academic Affairs, David K. Garnick, Suzanne B. Lovett, Irena S. M. Makarushka, Craig A. McEwen, and Mark C. Wethli.

Curriculum and Educational Policy

The Dean for Academic Affairs, *Chair*; the President, the Dean of the College, William H. Barker, Guy T. Emery, John M. Fitzgerald, Marilyn Reizbaum, William C. VanderWolk, and Marcia A. Weigle. *Undergraduates*: Gerald M. DiGiusto '96 and Jeffrey M. Napolitano '94. *Alternate*: Aaron M. Pratt '96.

Environmental Studies

The Director of Environmental Studies, *Chair*; Susan E. Bell, A. Myrick Freeman, Edward S. Gilfillan, Lawrence H. Simon, and Nathaniel T. Wheelwright. *Undergraduates*: Kimara Jebb '94, Michelle S. Comeau '94, and one other to be named.

Faculty Affairs

Allen Wells (1995), *Chair*; the Dean for Academic Affairs, Franklin G. Burroughs, Jr. (1994), Steven R. Cerf (1996), Deborah S. DeGraff (1996), Ann L. Kibbie (1994), Janet M. Martin (1994), and Rosemary A. Roberts (1994).

Faculty Research

David S. Page, *Chair*; the Dean for Academic Affairs, Sara A. Dickey, David K. Garnick, Jonathan P. Goldstein, and James L. Hodge. *Alternate*: Larry D. Lutchmansingh.

Gay and Lesbian Studies

Joseph D. Litvak, *Chair*; Helen L. Cafferty (*spring semester*), Celeste Goodridge, Arthur M. Hussey II (*spring semester*), Suzanne B. Lovett (*fall semester*), and Paul L. Nyhus.

Grievance (Sex)

Chair of Committee on Committees, *Chair*; Barbara Weiden Boyd, Samuel S. Butcher, Ronald L. Christensen, Joanne Feit Diehl, and Robert Knapp. *Alternate*: Susan E. Bell.

Human and Animal Research

Patsy S. Dickinson, *Chair*; the Dean for Academic Affairs, Susan E. Bell, Herbert Paris, Paul E. Schaffner, Elizabeth A. Stemmler, and Ray S. Youmans, D.V.M.

Latin American Studies

John H. Turner, *Chair*; Allen Wells, and Nathaniel T. Wheelwright.

Lectures and Concerts

Ronald L. Christensen, *Chair*; the Dean of the College, Barbara Weiden Boyd, John L. Howland, Arthur M. Hussey II, June A. Vail, and William C. Watterson. Undergraduates to be named.

Library

William C. Watterson, *Chair*; the College Librarian, Karin Dillman, James L. Hodge, Amy S. Johnson, and Susan A. Kaplan. *Undergraduates*: Ann P. Russell '96 and one other to be named.

Off-Campus Study

Allen L. Springer, *Chair*; Samuel S. Butcher, Raymond H. Miller, John H. Turner, and Susan E. Wegner. Two undergraduates to be named.

Recording

The Dean of the College, *Chair*; the Dean of Students, the Registrar, Gregory P. DeCoster, Sarah F. McMahan, Sharon L. Pedersen, and James H. Turner. *Undergraduates*: Kristen L. Deftos '94 and one other to be named. One alternate to be named.

Student Activities Fee

Howard S. Vandersea, *Chair*; the Student Activities Coordinator, John A. Calabrese, Linda J. Docherty, Burke O. Long, and Norean Radke Sharpe. *Undergraduates*: Thomas C. Bennitt '96, Andres E. Gentry '96, John A. E. Ghanotakis '94, and G. Jessica Keramas '96. *Alternate*: Raissa A. J. Maynard '96.

Student Awards

William L. Steinhart, *Chair*; Jane C. Girdham, Peter D. Lea, Ann A. Lofquist, and James W. McCalla.

Student Life

The Dean of the College, *Chair*; the Dean of Students, the Student Activities Coordinator, John A. Calabrese, Linda J. Docherty, Burke O. Long, Norean Radke Sharpe, and Howard S. Vandersea. *Undergraduates*: Yongyai Darayen Berry '96, Catherine M. Brawn '95, Kristen M. Duesel '94, and G. Jessica Keramas '96. *Alternate*: Stephanie A. Rogers '94.

Studies in Education

David A. Collings, *Chair (fall semester)*, Helen L. Cafferty, *Chair (spring semester)*; Robert Knapp, Nancy E. Riley, and Melinda Y. Small. *Ex officio*: T. Penny Martin. One undergraduate to be named. One alternate to be named.

Theater Arts

Randolph Stakeman, *Chair*; David A. Collings, Sara A. Dickey, John L. Howland, Robert R. Nunn, and June A. Vail (*fall semester*).

Women's Studies

Susan E. Bell, *Chair*; David A. Collings, Karin Dillman, Celeste Goodridge (*spring semester*), Nancy E. Riley, June A. Vail (*fall semester*), and Susan E. Wegner. *Ex officio*: Sarah F. McMahon and Jan Phillips. Undergraduates to be named.

Instructional Support Staff

Rene L. Bernier, B.S. (Maine), Laboratory Instructor in Chemistry and Laboratory Support Manager.

Pamela Jean Bryer, B.S., M.S. (Rensselaer Polytechnic Institute), Laboratory Instructor in Biology.

Beverly Ganter DeCoster, B.S. (Dayton), Laboratory Instructor in Chemistry.

Paulette Messier Fickett, A.B. (Maine-Presque Isle), Laboratory Instructor in Chemistry.

Judith Cooley Foster, A.B. (Brown), M.Sc. (Rhode Island), Laboratory Instructor in Chemistry and Director of Laboratories.

Alan Garfield, A.B. (New Hampshire), Laboratory Instructor in Biology.

Stephen Hauptman, B.A. (Connecticut College), M.A. (Illinois), M.Sc. (Cornell), Laboratory Instructor in Biology.

Michaela Keil, Teaching Fellow in German.

Colleen Trafton McKenna, B.A. (Southern Maine), Laboratory Instructor in Chemistry.

Marianne Morvan, Teaching Fellow in French.

Rubén Pérez Montesinos, Teaching Fellow in Spanish.

David L. Roberts, A.B. (Bowdoin), Ph.D. (Case Western Reserve), Teaching Associate in Physics.

Leah G. Shulsky, M.A. (Moscow Pedagogical Institute), Teaching Fellow in Russian.

Nadine Vallejos, Teaching Fellow in French.

RESEARCH ASSOCIATES

James R. Petite, Jr., B.S. (Georgetown), M.S. (Boston University), Research Associate in Psychobiology.

Dorothy Rosenberg, B.A., M.A., Ph.D. (Stanford), M.L. (University of Washington), Research Associate in German.

Peter K. Trumper, A.B. (St. Olaf), Ph.D. (Minnesota), Research Associate in Chemistry.

Officers of Administration

- Martha J. Adams**, Assistant Director of Alumni Relations Emerita.
- Rhoda Zimand Bernstein**, A.B. (Middlebury), A.M. (New Mexico), Registrar Emerita.
- Kenneth James Boyer**, A.B. (Rochester), B.L.S. (New York State Library School), College Editor Emeritus.
- Robert Melvin Cross**, A.B. (Bowdoin), A.M. (Harvard), L.H.D. (Bowdoin), Secretary of the College Emeritus.
- Myron Whipple Curtis**, A.B. (Bowdoin), A.M. (California-Los Angeles), Director of the Computing Center Emeritus.
- John Stanley DeWitt**, Supervisor of Mechanical Services Emeritus.
- Margaret Edison Dunlop**, A.B. (Wellesley), Associate Director of Admissions Emerita.
- James Packard Granger**, B.S. (Boston University), C.P.A., Controller Emeritus.
- Daniel Francis Hanley**, A.B. (Bowdoin), M.D. (Columbia), Sc.D. (Bowdoin), College Physician Emeritus.
- Wolcott A. Hokanson, Jr.**, A.B. (Bowdoin), M.B.A. (Harvard), Vice President for Administration and Finance Emeritus.
- Helen Buffum Johnson**, Registrar Emerita.
- Samuel Appleton Ladd, Jr.**, B.S. (Bowdoin), Director of Career Counseling and Placement Emeritus.
- John Bright Ladley**, B.S. (Pittsburgh), M.L.S. (Carnegie Institute of Technology), Public Services Librarian Emeritus.
- Donovan Dean Lancaster**, A.B. (Bowdoin), Director of the Moulton Union and the Centralized Dining Service Emeritus.
- Thomas Martin Libby**, A.B. (Maine), Associate Treasurer and Business Manager Emeritus.
- Elizabeth Kilbride Littlefield**, Administrative Assistant to the Dean for Academic Affairs Emerita.
- Betty Mathieson Massé**, Assistant to the Treasurer Emerita.
- Arthur Monke**, A.B. (Gustavus Adolphus), M.S. in L.S. (Columbia), Librarian Emeritus.
- Geoffrey Stanwood**, B.S. (Bowdoin), Assistant to the President Emeritus.
- Kathryn Drusilla Fielding Stemper**, A.B. (Connecticut College), Secretary to the President Emerita.

Doris Charrier Vladimiroff, A.B. (Duke), A.M. (Middlebury), Upward Bound Project Director Emerita.

Barbara MacPhee Wyman, Supervisor of the Service Bureau Emerita.

SENIOR OFFICERS

Robert Hazard Edwards, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Carleton), President of the College.

Charles R. Beitz, A.B. (Colgate), M.A. (Michigan), M.A., Ph.D. (Princeton), Dean for Academic Affairs.

Kent John Chabotar, B.A. (St. Francis), M.P.A., Ph.D. (Syracuse), Vice President for Finance and Administration and Treasurer.

Elizabeth Chadwick, A.B. (Bryn Mawr), Ph.D. (Yale), Dean of the College.

Richard Alan Mersereau, A.B. (Bowdoin), M.A.T. (Wesleyan), Executive Assistant to the President and the Governing Boards.

Richard E. Steele, B.A. (Harvard), M.A. (Vermont), Ph.D. (Wisconsin-Madison), Dean of Admissions.

William A. Torrey III, A.B., M.S.Ed. (Bucknell), Vice President for Development and Alumni Relations.

ATHLETICS

Sidney John Watson, B.S. (Northeastern), Ashmead White Director of Athletics.

John D. Cullen, A.B. (Brown), Assistant Director/Coach.

Lynn M. Ruddy, B.S. (Wisconsin-Oshkosh), Assistant Director/Coach.

AUDIOVISUAL SERVICES

Roger Doran, B.A. (Nasson), Administrator.

BETHEL POINT MARINE RESEARCH STATION

Edward Smith Gilfillan III, A.B. (Yale), M.S., Ph.D. (British Columbia), Director.

BOOKSTORE

Robert Thomas Santry, B.A. (Southern Maine), Bookstore Manager.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

Gail R. Berneike, B.A. (Wheaton), M.Ed. (Vermont), Coordinator/Chef.

Donald E. Bernier, B.A. (Maine-Portland), Coordinator/Chef.

CAMPUS SERVICES

Mark Schmitz, A.A.S. (Monroe Community College), A.A.S. (Cayuga County Community College), Director.

CAREER SERVICES

Lisa B. Tessler, A.B. (Bowdoin), Ed.M. (Harvard), Director.

Sandra Fulgham, B.S. (Maine-Farmington), Job Locator and Development Intern.

Susan D. Livesay, A.B. (Smith), Associate Director.

Laurel A. Smith, B.A. (Connecticut), M.S. (Northeastern), Career Development Counselor.

CHEMISTRY LABORATORIES

Judith Cooley Foster, A.B. (Brown), M.S. (Rhode Island), Laboratory Instructor and Director.

Pamalee J. Labbe, Administrative Assistant.

Rene L. Bernier, B.S. (Maine-Orono), Laboratory Support Manager.

CHILDREN'S CENTER

Bette Spettel, B.S., M.S. (Wheelock), Director.

Jeanne Baker-Stinson, B.A. (Carleton), M.Ed. (Vanderbilt), Lead Pre-school/Kindergarten Caregiver.

Gretchen Burleigh-Johnson, B.S.Ed. (Wheelock), Co-lead Toddler Caregiver.

Margaret M. MacFeat, B.S. (Maine-Orono), Lead Infant Caregiver.

Jennifer McEvoy, B.S. (Wheelock), Infant Caregiver.

Denise Perry, A.A.Ed. (Westbrook), Co-lead Toddler Caregiver.

Elizabeth P. Tietgen, B.A. (Dickinson), M.S.Ed. (Wheelock), Preschool Caregiver.

COMPUTING CENTER

Thaddeus Tibbetts Macy, A.B. (Maine), Acting Director.

Charles Ellwood Banks, A.B. (Montana), B.S. (Montana), Instructional Resource Coordinator.

Harry J. Hopcroft, Jr., A.B. (Brown), M.B.A. (Adelphi), Systems/Network Manager.

Susan T. Kellogg, B.S. (Southern Maine), Administrative Applications Coordinator.

Mark Ingwald Nelsen, A.B. (California–Berkeley), Senior Project Engineer.

Paul C. Petersen, B.S. (Northeastern), Administrative Applications Coordinator.

Stephen G. Smith, A.B. (Colby), M.B.A. (Maine), Manager of Administrative Computing.

CONTROLLER'S OFFICE

Judith A. Haupin, B.A. (SUNY–Albany), M.B.A. (New Hampshire), Controller.

Pauline Paquet Farr, Gift and Fund Accountant.

Lisa S. Hill, B.S. (Florida State), C.P.A., Assistant Controller.

Michelle A. McDonough, A.B. (Keuka), Chief Cashier.

Marilyn Nelson McIntyre, A.B. (Grinnell), M.P.A. (Pennsylvania State), General Ledger Supervisor.

Gail Wine, A.B. (Earlham), Restricted Fund Accountant.

COUNSELING SERVICE

Robert C. Vilas, A.B., M.Ed. (St. Lawrence), Ph.D. (Iowa), Director.

Mary E. McCann, B.A. (Southern Maine), M.Ed. (Harvard), College Counselor.

Karen E. Sella, A.B. (Springfield College, Massachusetts), Counseling Intern.

Roberta Penn Zuckerman, A.B. (City College of New York), M.S.W. (Hunter College School of Social Work), Certificate in Psychotherapy (Institute for Contemporary Psychotherapy), Counselor.

OFFICE OF THE DEAN FOR ACADEMIC AFFAIRS

Charles R. Beitz, A.B. (Colgate), M.A. (Michigan), M.A., Ph.D. (Princeton), Dean for Academic Affairs.

Ann C. Ostwald, B.S.F.S. (Georgetown University School of Foreign Service), M.A. (California–Berkeley), Administrative Assistant to the Dean.

Randolph Stakeman, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Associate Dean for Academic Affairs.

OFFICE OF THE DEAN OF ADMISSIONS

Richard E. Steele, B.A. (Harvard), M.A. (Vermont), Ph.D. (Wisconsin–Madison), Dean of Admissions.

Jennifer H. Burns, A.B. (Bowdoin), Ed.M. (Harvard), Admissions Officer.

Karen Guttentag, B.A. (Carleton), Admissions Officer.

Linda M. Kreamer, B.A. (Maryland), M.L.A. (Johns Hopkins), Associate Dean.

Anne Wohltman Springer, A.B. (Bowdoin), Assistant Dean.

Andrew C. Wheeler, A.B. (Bowdoin), Admissions Officer.

Staci L. Williams, A.B. (Bowdoin), Admissions Officer/Coordinator, Recruitment of Students of Color.

OFFICE OF THE DEAN OF THE COLLEGE

Elizabeth Chadwick, A.B. (Bryn Mawr), Ph.D. (Yale), Dean of the College.

Alice F. Yanok, Administrative Assistant to the Dean of the College.

OFFICE OF THE DEAN OF STUDENTS

Kenneth Adell Lewallen, B.S. (Texas A&M), M.A., Ph.D. (Kansas State), Dean of Students.

Ana Marquez Brown, A.B. (Reed), M.S. (Wisconsin-Madison), Associate Dean of Students.

Douglas W. Ebeling, B.S. (Miami-Ohio), M.B.A. (Bowling Green), Area Coordinator/Advisor to Coeducational Fraternities.

Joan M. Fortin, B.A. (Colby), M.Ed. (Maine-Orono), Area Coordinator/Residential Life Programming Advisor.

DEVELOPMENT, ALUMNI RELATIONS, AND COMMUNICATIONS

William A. Torrey III, A.B., M.S.Ed. (Bucknell), Vice President for Development and Alumni Relations.

Betty L. Andrews, Assistant Director of Annual Giving.

Mary C. Bernier, Director of Development Services.

Grace M. J. Brescia, A.B. (Dartmouth), Director of Annual Giving.

Katharine B. Bunge, A.B. (Brown), M.A. (George Washington), Bicentennial Director.

Craig C. Cheslog, A.B. (Bowdoin), Sports Information Intern.

Alison M. Dodson, A.B. (Harvard-Radcliffe), Director of Communications.

Josiah H. Drummond, Jr., A.B. (Colby), M.Ed. (Maine), Director of Planned Giving.

Sara B. Eddy, A.B. (Bowdoin), Assistant Director of Alumni Relations.

Heather T. K. Hietala, A.B. (Bowdoin), Ed.M. (Harvard), Director of Alumni Relations.

Scott Whitney Hood, B.A. (Lake Forest), M.A. (Southern Maine), Director of Media Relations.

Kathryn Humphreys, A.B. (Princeton), M.A., Ph.D. (Cornell), Director of Corporate and Foundation Relations.

Stephen P. Hyde, B.A., J.D. (Maine), Associate Director of Major Gifts.

Robert J. Kallin, B.S. (Bucknell), Director of Capital Support.

Maria Karvonides, A.B. (Wheaton), Acting Director of Special and Summer Programs.

William P. Kunitz, B.S. (Michigan State), Director of Development Information Systems.

Susan R. Moore, A.B. (Maine), M.L.S. (Syracuse), Director of Development Research.

John A. Norton, A.B. (Susquehanna), M.S. (American), Associate Director of Major Gifts.

Elizabeth D. Orlic, A.B. (Colby), Assistant Director of Annual Giving.

Susan Lea Ransom, B.A. (Reed College), M.A. (Clark), Publications Editor.

Randolph H. Shaw, A.B. (Bowdoin), Associate Director of Annual Giving.

Richard D. Stephenson, A.B. (Brown), Director of Major Gifts.

Lucie G. Teegarden, A.B. (College of New Rochelle), A.M. (Yale), Director of Publications.

Harry K. Warren, A.B. (Pennsylvania), Secretary of the College.

DINING SERVICE

Mary Lou McAteer Kennedy, R.D., B.S. (Vermont), A.M. (Framingham State), Director.

Kenneth Cardone, A.S. (Johnson and Wales), Executive Chef.

Orman Hines, A.S. (Maine–Orono), Purchasing Manager.

Tenley A. Meara, A.S. (New Hampshire College), Financial and Accounting Supervisor.

Jon Wiley, B.A. (New Hampshire), A.S. (Southern Maine Technical), Operations Manager, Moulton Union.

ENVIRONMENTAL STUDIES

Helen Koulouris, B.S. (Maine), Program Coordinator.

OFFICE OF THE VICE PRESIDENT FOR FINANCE AND ADMINISTRATION AND TREASURER

Kent John Chabotar, B.A. (St. Francis), M.P.A., Ph.D. (Syracuse), Vice President for Finance and Administration and Treasurer.

Gerald L. Boothby, B.A. (New Hampshire), M.B.A. (Plymouth State), Assistant Vice President for Finance and Administration and Director of Budgets.

Judith Coffin Reindl, Administrative Assistant to the Vice President for Finance and Administration and Treasurer.

Martin F. Szydlowski, B.S. (Providence College), Assistant to the Treasurer.

DUDLEY COE HEALTH CENTER

Robin Lewis Beltramini, B.A. (College of the Atlantic), M.S., R.N.C., F.N.P. (Pace), Co-Director.

Ian F. M. Buchan, B.A. (New Hampshire), B.S. (Oklahoma), Co-Director.

Brenda M. Rice, R.T.R. (Portland), Administrator/Radiology Technologist.

HUMAN RESOURCES

Kathleen T. Gubser, B.S., B.A. (Xavier), M.A.I.R. (Cincinnati), Director.

Mary E. Demers, A.B. (Bowdoin), Assistant Director.

INSTITUTIONAL RESEARCH

Christine A. Brooks, B.A. (University of San Diego), M.A. (California-Riverside), M.A. (Notre Dame), Director of Institutional Research.

LANGUAGE MEDIA CENTER

Carmen M. Greenlee, Supervisor.

HAWTHORNE-LONGFELLOW LIBRARY

Sherrie S. Bergman, B.A. (Brooklyn College), M.S. in L.S. (Columbia), Librarian.

Dianne Molin Gutscher, B.S. (Pratt Institute), C.A. (Academy of Certified Archivists), Special Collections Curator.

Virginia W. Hopcroft, A.B. (Brown), M.L.S. (Long Island), Reference Librarian.

Kathleen Kenny, A.B. (Earlham), M.L.S. (Indiana), Science Librarian.

Judith Reid Montgomery, A.B. (Valparaiso), M.L.S. (Kent State), Associate Librarian for Public Services.

Leanne N. Pander, B.A. (Daemen), M.L.S. (Rhode Island), Reference Librarian.

Anne Haas Shankland, A.B. (Ohio Wesleyan), M.L.S. (Florida State), Art Librarian.

Sydnae Morgan Steinhart, B.S. (Lebanon Valley), M.L.S. (Pittsburgh), Reference/Catalog Librarian.

Lynda Kresge Zendzian, B.A., M.A. (Tufts), M.L.S. (Rhode Island), Acting Head, Catalog Department.

MOULTON UNION

William J. Fruth, A.A. (East Los Angeles), B.S. (San Diego State), A.M. (West Virginia), Director of the Moulton Union and Student Activities Coordinator.

MUSEUM OF ART

Katharine J. Watson, A.B. (Duke), A.M., Ph.D. (Pennsylvania), Director.

Suzanne K. Bergeron, B.A. (Mount Holyoke), Assistant Director for Operations.

Helen S. Dubé, B.S. (Syracuse), Education Program Coordinator.

Kathleen V. Kelley, B.A. (Maryland), M.A. (George Washington), Registrar.

Chaké K. Higginson, A. B. (Bowdoin), Museum Shop Manager.

Justin P. Wolff, A.B. (Bowdoin), Andrew W. Mellon Curatorial Intern.

MUSIC

Anthony F. Antolini, A.B. (Bowdoin), M.A., M.A., Ph.D. (Stanford), Director of Bowdoin Chorus.

John P. Morneau, B.M. (New Hampshire), Director of Concert Band.

Barbara Lillian Whitepine, A.B. (Colby), Administrative Assistant.

OUTING CLUB

D. Michael Woodruff, A.B. (Bowdoin), Coach/Director.

**PEARY-MACMILLAN ARCTIC MUSEUM
AND ARCTIC STUDIES CENTER**

Susan Ann Kaplan, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Director.
Gerald Frederick Bigelow, A.B. (Columbia College), Ph.D. (Cambridge),
 Curator/Registrar.
David R. Maschino, B.F.A. (Alma College), Technician.

PHYSICAL PLANT

David Newton Barbour, B.S. (Maine), M.B.A. (Southern Maine), Director.
Ann D. Goodenow, Assistant Director for Grounds and Housekeeping.
George E. Libby, Assistant Director for Maintenance.
Richard C. Parkhurst, B.A. (St. Francis), Assistant Director for Administrative Services.
George S. Paton, B.S. (Massachusetts-Amherst), M.B.A. (New Hampshire College), Associate Director and Campus Engineer.

OFFICE OF THE PRESIDENT

Richard Alan Mersereau, A.B. (Bowdoin), M.A.T. (Wesleyan), Executive Assistant to the President and the Governing Boards.
Betty C. Thompson, B.A. (Northeastern State, Oklahoma), M.Ed. (Wichita State), Assistant to the President for Multicultural Programs.
Pamela Phillips Torrey, A.B. (Princeton), Director of Donor Relations.
Cynthia P. Wonson, Executive Secretary to the President.

REGISTRAR

Sarah Jane Bernard, B.S. (Bates), C.M.A. (Laban Institute of Movement Studies), Registrar.

SECURITY

Donna M. Loring, B.A. (Maine-Orono), Certificate of Completion, Municipal Police School (Maine Criminal Justice Academy), Chief of Security.
John K. Alexander, Certificate (Police Academy), Security Sergeant.

STUDENT AID

Walter Henry Moulton, A.B. (Bowdoin), Director.
Stephen H. Joyce, B.A. (Williams College), Ed.M. (Harvard), Assistant Director.

UPWARD BOUND

Helen E. Pelletier, A.B. (Bowdoin), M.A. (Georgetown), Director.

Bridget D. Mullen, B.A., M.Phil. (College of the Atlantic), Academic Counselor/Coordinator of Program Services.

Kenneth E. Hopple, A.B. (Dennison), Academic Counselor/Coordinator of Student Services.

WOMEN'S RESOURCE CENTER

Janice E. Brackett, B.S. (Cornell), Coordinator.

WOMEN'S STUDIES PROGRAM

Jananne Kay Phillips, A.B. (Washburn), A.M. (Brown), Program Administrator.

GENERAL COLLEGE COMMITTEES

Bias Incident Group

The President, *Chair*; the Dean of the College, the Dean of Students, David N. Barbour, Peter D. Lea, Ann A. Lofquist, Donna M. Loring, Richard A. Mersereau, Betty C. Thompson, and Robert C. Vilas. *Undergraduates*: Peter D. Hodgin '94 and Christopher B. Ledwick '95.

Bicentennial Committee

The Steering Committee: Merton G. Henry, *Chair*; Rosalyne S. Bernstein, Paul P. Brontas, Katharine B. Bunge, Tracy J. Burlock, Herbert S. French, Jr., Gordon F. Grimes, Barbara J. Kaster, Molly Hoagland King, Edward P. Laine, Cynthia G. McFadden, Richard Mersereau, Robert H. Millar, Clifton C. Olds, Susan B. Ravdin, A. Raymond Rutan, Sanford R. Sistare, William A. Torrey, and William B. Whiteside.

Board on Sexual Harassment

James E. Ward, *Chair*; Patsy S. Dickinson, Scott W. Hood, Kathryn Humphreys. *Alternates*: Linda J. Docherty, Joseph D. Litvak, Anne W. Springer, and Martin F. Szydlowski. Two undergraduates to be named.

Bowdoin Administrative Staff Steering Committee

Stephen H. Joyce, *Chair*; Kenneth Cardone, Ann Goodenow, Heather T. K. Hietala, Scott W. Hood, Marilyn N. McIntyre, Betty C. Thompson; Kathleen T. Gubser and Richard A. Mersereau, *ex officio*.

Budget and Financial Priorities Committee

R. Wells Johnson, *Chair*; the Dean for Academic Affairs, the Dean of the College, the Treasurer, Robert K. Greenlee, Joanne Levesque, Craig A. McEwen, Lynda K. Zendzian. *Undergraduate*: James A. Hale '94. *Alternate*: Lewis P. Fickett '95.

Computer Budget Committee

Paul E. Schaffner, *Chair*; the Computing Center Specialist, the Manager of the Computing Center, Christine Brooks, William Kunitz, Raymond H. Miller, Carey R. Phillips, and Martin F. Szydowski.

Environmental, Historic, and Aesthetic Impact

John McKee, *Chair*; Amy S. Johnson, Edward P. Laine, and Katharine J. Watson. *Undergraduates*: Warren M. Durbin '96, Scott M. Dyer '95, Donald E. Gilbert '95, and S. Hoyt Peckman '95.

Honor Code/Judicial Board

Jane E. Knox-Voina and James H. Turner.

Oversight Committee on Multicultural Affairs

The Dean for Academic Affairs, the Dean of the College, the Treasurer, Iris W. Davis '78, Larry D. Lutchmansingh, Donna M. Loring, Irena S. M. Makarushka, and Betty C. Thompson. *Undergraduates*: Jorge Santiago '94 and one to be named.

Strategic Planning Task Force

The President, *Chair*; the Dean for Academic Affairs, the Dean of Admissions, the Dean of the College, the Treasurer, the Vice President for Development, Mary M. Kennedy, Craig A. McEwen, Richard A. Mersereau, Paul L. Nyhus, Rodman E. Redman, David J. Vail, one representative from the Curriculum and Educational Policy Committee, and one representative from the Faculty Affairs Committee. *Undergraduates*: Dan Huecker '95 and Karin Stawarky '94. *Alternate*: Zebediah Rice '94.

Support Staff Advocacy Committee

Marsha L. Merryman, *Chair*; Julie A. Carey, Nancy A. Dorrie, Timothy J. Hagar, Rebecca L. Janisch, Anne M. Johnson, Mary Jo Maguire, Norma J. McLoughlin, Bonnie J. Pardue, Rodman E. Redman, Peter O. Russell.

Appendix: Prizes and Distinctions

THE BOWDOIN PRIZE: This fund was established as a memorial to William John Curtis 1875, LL.D. '13, by his wife and children. The prize, four-fifths of the total income not to exceed \$10,000, is to be awarded "once in each five years to the graduate or former member of the College, or member of its faculty at the time of the award, who shall have made during the period the most distinctive contribution in any field of human endeavor. The prize shall only be awarded to one who shall, in the judgment of the committee of award, be recognized as having won national and not merely local distinction, or who, in the judgment of the committee, is fairly entitled to be so recognized." (1928)

The first award was made in 1933 and the most recent in 1990. The recipient in 1985 was Joan Benoit Samuelson '79. Joint recipients of the award in 1990 were Professors Dana W. Mayo and Samuel S. Butcher.

THE PRESERVATION OF FREEDOM FUND: Gordon S. Hargraves '19 established this fund to stimulate understanding and appreciation of the rights and freedoms of the individual, guaranteed under the Constitution of the United States. The prize is to be awarded to a student, member of the faculty, or group of Bowdoin alumni making an outstanding contribution to the understanding and advancement of human freedoms and the duty of the individual to protect and strengthen these freedoms at all times. (1988)

The first award was made in 1988 to William B. Whiteside, Frank Munsey Professor of History Emeritus. The recipient of the award in 1993 was Joseph C. Wheeler '48, the retired chairman of the Development Assistance Committee of the United States Organization for Economic Cooperation and Development (OECD).

THE COMMON GOOD AWARD: Established on the occasion of the Bicentennial, the Common Good Award honors those alumni who have demonstrated an extraordinary, profound, and sustained commitment to the common good, in the interest of society, with conspicuous disregard for personal gain in wealth or status. Seven Common Good Awards will be presented during the bicentennial year and one or two awards annually thereafter.

PRIZES IN GENERAL SCHOLARSHIP

Abraxas Award: An engraved pewter plate is awarded to the school sending two or more graduates to the College, whose representatives maintain the highest standing during their first year. This award was established by the Abraxas Society. (1915)

James Bowdoin Day: Named in honor of the earliest patron of the College, James Bowdoin Day was instituted in 1941 to accord recognition to those undergraduates who distinguish themselves in scholarship. Inaugurated by Stanley Perkins Chase '05, Henry Leland Chapman Professor of English Literature (1925–51), the exercises consist of the announcement of awards, the presentation of books, a response by an undergraduate, and an address.

The James Bowdoin Scholarships, carrying no stipend, are awarded to undergraduates who have completed at least the equivalent of two four-credit semesters at Bowdoin. The scholarships are determined on the basis of a student's entire record at

Bowdoin. In the year preceding the award, a student must have been actively engaged in full-time academic work, and at least one of the semesters must have been at Bowdoin. For a student to be named a James Bowdoin Scholar, three-quarters of his or her grades (computed on the basis of full-course equivalents) must be A/HH or B/H, with at least one-quarter of them A/HH. In addition, there must be two grades of A/HH for each grade of C/P. Students who have received grades of D or F are ineligible.

A book, bearing a replica of the early College bookplate serving to distinguish the James Bowdoin Collection in the library, is presented to every undergraduate who has carried a full course program and has received a grade of A/HH in each of his or her courses during the last academic year.

Brooks-Nixon Prize Fund: The annual income of a fund established by Percy Willis Brooks 1890 and Mary Marshall Brooks is awarded each year as a prize to the best Bowdoin candidate for selection as a Rhodes scholar. (1975)

Brown Memorial Scholarships: This fund, for the support of four scholarships at Bowdoin College, was given by the Honorable J. B. Brown, of Portland, in memory of his son, James Olcott Brown 1856, A.M. 1859. According to the provisions of this foundation, a prize will be paid annually to the best scholar in each undergraduate class who shall have graduated at the high school in Portland after having been a member thereof not less than one year. The awards are made by the city of Portland upon recommendation of the College. (1865)

Dorothy Haythorn Collins Award: This award, given by Dorothy Haythorn Collins and her family to the Society of Bowdoin Women, is used to honor a student "who has achieved academic and general excellence in his or her chosen major" at the end of the junior year. Each year the society selects a department from the sciences, social studies, or humanities. The selected department chooses a student to honor by purchasing books and placing them with a nameplate in the department library. The student also receives a book and certificate of merit. (1985)

Almon Goodwin Prize Fund: This fund was established by Mrs. Maud Wilder Goodwin in memory of her husband, Almon Goodwin 1862. The annual income is awarded to a member of Phi Beta Kappa chosen by vote of the Board of Trustees of the College at the end of the recipient's junior year. (1906)

George Wood McArthur Prize: This fund was bequeathed by Almira L. McArthur, of Saco, in memory of her husband, George Wood McArthur 1893. The annual income is awarded as a prize to that member of the graduating class who, coming to Bowdoin as the recipient of a prematriculation scholarship, shall have attained the highest academic standing among such recipients within the class. (1950)

Phi Beta Kappa: The Phi Beta Kappa Society, national honorary fraternity for the recognition and promotion of scholarship, was founded at the College of William and Mary in 1776. The Bowdoin chapter (Alpha of Maine), the sixth in order of establishment, was founded in 1825. Election is based primarily on scholarly achievement, and consideration is given to the student's entire college record. Students who have studied away are expected to have a total academic record, as well as a Bowdoin record, that meets the standards for election. Nominations are made three times a year, usually in September, February, and May. The total number of students selected in any year does not normally exceed ten percent of the number graduating in May. Students elected to Phi Beta Kappa are expected to be persons of integrity and good moral character. Candidates must have completed at least twenty-four semester courses of college work, including at least sixteen courses at Bowdoin.

Leonard A. Pierce Memorial Prize: This prize, established by friends and associates of Leonard A. Pierce '05, A.M. H'30, LL.D. '55, is awarded annually to that member of the graduating class who is continuing his or her education in an accredited law school and who attained the highest scholastic average during his or her years in college. It is paid to the recipient upon enrollment in law school. (1960)

COMMENCEMENT PRIZES

DeAlva Stanwood Alexander Prize: Established by DeAlva Stanwood Alexander 1870, A.M. 1873, LL.D. '07, this fund furnishes two prizes for excellence in select declamation. (1906)

Class of 1868 Prize: Contributed by the Class of 1868, this prize is awarded for a written and spoken oration by a member of the senior class. (1868)

Goodwin Commencement Prize: Established by the Reverend Daniel Raynes Goodwin 1832, A.M. 1835, D.D. 1853, the prize is awarded for a written or oral presentation at Commencement. (1882)

DEPARTMENTAL PRIZES

Africana Studies

Lennox Foundation Book Prize: This fund was established by the Lennox Foundation and Jeffrey C. Norris '86. An appropriate book is awarded to a student graduating in Africana Studies. (1990)

Art

Art History Junior-Year Prize: This prize, funded annually by a donor wishing to remain anonymous, is awarded to a student judged by the Department of Art to have achieved the highest distinction in the major program in art history and criticism at the end of the junior year. (1979)

Art History Senior-Year Prize: This prize, established by a donor wishing to remain anonymous, is awarded to a graduating senior judged by the Department of Art to have achieved the highest distinction in the major in art history and criticism. (1982)

Anne Bartlett Lewis Memorial Fund: This fund was established by Anne Bartlett Lewis's husband, Henry Lewis, and her children, William H. Hannaford, David Hannaford, and Anne D. Hannaford. The annual income of the fund is used for demonstrations of excellence in art history and creative visual arts by two students enrolled as majors in the Department of Art. (1981)

Richard P. Martel, Jr., Memorial Fund: This prize is awarded annually to the Bowdoin undergraduate who, in the judgment of the studio art faculty, is deemed to have produced the most creative, perceptive, proficient, and visually appealing art work exhibited at the College during the academic year. (1990)

Biology

Copeland-Gross Biology Prize: This prize, named in honor of Manton Copeland and Alfred Otto Gross, Sc.D. '52, both former Josiah Little Professors of Natural Science, is awarded to that graduating senior who has best exemplified the idea of a liberal education during the major program in biology. (1972)

Donald and Harriet S. Macomber Prize in Biology: This fund was established by Dr. and Mrs. Donald Macomber in appreciation for the many contributions of Bowdoin in

the education of members of their family—David H. Macomber '39, Peter B. Macomber '47, Robert A. Zottoli '60, David H. Macomber, Jr. '67, Steven J. Zottoli '69, and Michael C. Macomber '73. The income of the fund is to be awarded annually as a prize to the outstanding student in the Department of Biology. If, in the opinion of the department, in any given year there is no student deemed worthy of this award, the award may be withheld and the income for that year added to the principal of the fund. (1967)

James Malcolm Moulton Prize in Biology: This fund was established by former students and other friends in honor of James Malcolm Moulton, former George Lincoln Skolfield, Jr., Professor of Biology, to provide a book prize to be awarded annually to the outstanding junior majoring in biology, as judged by scholarship and interest in biology. At the discretion of the Department of Biology, this award may be made to more than one student or to none in a given year. (1984)

Chemistry

Philip Weston Meserve Fund: This prize was established in memory of Professor Philip Weston Meserve '11, "to be used preferably to stimulate interest in Chemistry." (1941)

Classics

Hannibal Hamlin Emery Latin Prize: This prize, established in honor of her uncle, Hannibal Hamlin Emery 1874, by Persis E. Mason, is awarded to a member of the junior or senior class for proficiency in Latin. (1922)

Nathan Goold Prize: This prize, established by Abba Goold Woolson, of Portland, in memory of her grandfather, is awarded to that member of the senior class who has, throughout the college course, attained the highest standing in Greek and Latin studies. (1922)

Sewall Greek Prize: This prize, given by Jotham Bradbury Sewall 1848, S.T.D. '02, formerly professor of Greek in the College, is awarded to the member of the sophomore class who sustains the best examination in Greek. (1879)

Sewall Latin Prize: This prize, also given by Professor Sewall, is awarded to the member of the sophomore class who sustains the best examination in Latin. (1879)

Economics

Noyes Political Economy Prize: This prize, established by Crosby Stuart Noyes, A.M. H1887, is awarded to the best scholar in political economy. (1897)

English

Brown Competition Prizes: Two prizes from the annual income of a fund established by Philip Greely Brown 1877, A.M. 1892, in memory of Philip Henry Brown 1851, A.M. 1854, are offered to members of the senior class for excellence in extemporaneous English composition. (1874)

Hiland Lockwood Fairbanks Prize Fund: This fund was established by Captain Henry Nathaniel Fairbanks, of Bangor, in memory of his son, Hiland Lockwood Fairbanks 1895. The annual income is awarded as first and second prizes to the two outstanding students in English 50. (1909)

Hawthorne Prize: The income of a fund given in memory of Robert Peter Tristram Coffin '15, Litt.D. '30, Pierce Professor of Literature, and in memory of the original founders of the Hawthorne Prize, Nora Archibald Smith and Kate Douglas Wiggin,

Litt.D. '04, is awarded each year to the author of the best short story. This competition is open to members of the sophomore, junior, and senior classes. (1903)

Nathalie Walker Llewellyn Commencement Poetry Prize: This prize, established by and named for the widow of Dr. Paul Andrew Walker '31, is awarded to the Bowdoin student who, in the opinion of the Department of English, shall have submitted the best work of original poetry. The prize may take the form of an engraved medal, an appropriate book, or a cash award. The name of the recipient is announced at Commencement. (1990)

Horace Lord Piper Prize: This prize, established by Sumner Increase Kimball 1855, Sc.D. 1891, in memory of Maj. Horace Lord Piper 1863, is awarded to that member of the sophomore class who presents the best "original paper on the subject calculated to promote the attainment and maintenance of peace throughout the world, or on some other subject devoted to the welfare of humanity." (1923)

Stanley Plummer Prizes: The annual income of a fund established by Stanley Plummer 1867 is awarded to the two outstanding students in English 52, Electronic Film Production. First and second prizes are awarded in a two-to-one ratio. (1919)

Poetry Prize: The annual income of a fund established by Gian Raoul d'Este-Palmieri II '26 is given each semester for the best poem written by an undergraduate. (1926)

Pray English Prize: A prize given by Dr. Thomas Jefferson Worcester Pray 1844 is awarded to the best scholar in English literature and original English composition. (1889)

Forbes Rickard, Jr., Poetry Prize: A prize, given by a group of alumni of the Bowdoin chapter of Alpha Delta Phi Fraternity in memory of Forbes Rickard, Jr. '17, who lost his life in the service of his country, is awarded to the undergraduate writing the best poem. (1919)

David Sewall Premium: This prize is awarded to a member of the first-year class for excellence in English composition. (1795)

Mary B. Sinkinson Short Story Prize: A prize, established by John Hudson Sinkinson '02 in memory of his wife, Mary Burnett Sinkinson, is awarded each year for the best short story written by a member of the junior or senior class. (1961)

Bertram Louis Smith, Jr., Prize: The annual income of a fund established by his father in memory of Bertram Louis Smith, Jr. '03, to encourage excellence of work in English literature is awarded by the department to a member of the junior class who has completed two years' work in English literature. Ordinarily, the prize is given to a student majoring in English, and performance of major work as well as record in courses is taken into consideration. (1925)

German

The Old Broad Bay Prizes in Reading German: The income from a fund given by Jasper J. Stahl '09, Litt.D. '60, and by others is awarded to students who, in the judgment of the department, have profited especially from their instruction in German. The fund was established as a living memorial to those remembered and unremembered men and women from the valley of the Rhine who in the eighteenth century founded the first German settlement in Maine at Broad Bay, now Waldoboro. (1964)

The German Consular Prize in Literary Interpretation: This prize was initiated by the German Consulate, from whom the winner receives a certificate of merit and a

book prize, in addition to a small financial prize to be awarded from the income of the fund. The prize is awarded annually to the senior German major who wins a competition requiring superior skills in literary interpretation. (1986)

Government and Legal Studies

Philo Sherman Bennett Prize Fund: This fund was established by William Jennings Bryan from trust funds of the estate of Philo Sherman Bennett, of New Haven, Connecticut. The income is used for a prize for the best essay discussing the principles of free government. Competition is open to seniors. (1905)

Jefferson Davis Award: A prize consisting of the three-volume *Jefferson Davis* by Hudson Strode and the annual income of a fund is awarded to the student excelling in constitutional law. (1973)

Fessenden Prize in Government: A prize given by Richard Dale '54 is awarded by the Department of Government to that graduating senior who as a government major has made the greatest improvement in studies in government, who has been accepted for admission into either law or graduate school or has been accepted for employment in one of certain federal services, and who is a United States citizen. (1964)

History

Class of 1875 Prize in American History: A prize established by William John Curtis 1875, LL.D. '13, is awarded to the student who writes the best essay and passes the best examination on some assigned subject in American history. (1901)

Dr. Samuel and Rose A. Bernstein Prize in History: This prize, given by Roger K. Berle '64, is awarded annually to that student who has achieved excellence in the study of European history. (1989)

James E. Bland History Prize: The income of a fund established by colleagues and friends of James E. Bland, a member of Bowdoin's Department of History from 1969 to 1974, is awarded to the Bowdoin undergraduate, chosen by the history department, who has presented the best history honors project not recognized by any other prize at the College. (1989)

Mathematics

Edward Sanford Hammond Mathematics Prize: A book is awarded on recommendation of the Department of Mathematics to a graduating senior who is completing a major in mathematics with distinction. Any balance of the income from the fund may be used to purchase books for the department. The prize honors the memory of Edward S. Hammond, for many years Wing Professor of Mathematics, and was established by his former students at the time of his retirement. (1963)

Smyth Mathematical Prize: This prize, established by Henry Jewett Furber 1861 in honor of Professor William Smyth, is given to that student in each sophomore class who obtains the highest grades in mathematics courses during the first two years. The prize is awarded by the faculty of the Department of Mathematics, which will take into consideration both the number of mathematics courses taken and the level of difficulty of those courses in determining the recipient. The successful candidate receives one-third of the prize at the time the award is made. The remaining two-thirds is paid to him or her in installments at the close of each term during junior and senior years. If a vacancy occurs during those years, the income of the prize goes to the member of the winner's class who has been designated as the alternate recipient by the department. (1876)

Music

Sue Winchell Burnett Music Prize: This prize, established by Mrs. Rebecca P. Bradley in memory of Mrs. Sue Winchell Burnett, is awarded upon recommendation of the Department of Music to that member of the senior class who has majored in music and has made the most significant contribution to music while a student at Bowdoin. If two students make an equally significant contribution, the prize will be divided equally between them. (1963)

Philosophy

Philip W. Cummings Philosophy Prize: This prize, established by Gerard L. Dube '55 in memory of his friend and classmate, is awarded to the most deserving student in the Department of Philosophy. (1984)

Physics

Edwin Herbert Hall Physics Prize: This prize, named in honor of Edwin Herbert Hall 1875, A.M. 1878, LL.D. '05, the discoverer of the Hall effect, is awarded each year to the best sophomore scholar in the field of physics. (1953)

Noel C. Little Prize in Experimental Physics: This prize, named in honor of Noel C. Little '17, Sc.D. '67, professor of physics and Josiah Little Professor of Natural Science, is awarded to a graduating senior who has distinguished himself or herself in experimental physics. (1968)

Psychology

Frederic Peter Amstutz Memorial Prize Fund: This prize, established in memory of Frederic Peter Amstutz '85 by members of his family, is awarded to a graduating senior who has achieved distinction as a psychology major. (1986)

Religion

Edgar Oakes Achorn Prize Fund: The income of a fund established by Edgar Oakes Achorn 1881 is awarded as a prize for the best essay written by a member of the second- or first-year classes in Religion 101. (1932)

Lea Ruth Thumim Biblical Literature Prize: This prize, established by Carl Thumim in memory of his wife, Lea Ruth Thumim, is awarded each year by the Department of Religion to the best scholar in biblical literature. (1959)

Romance Languages

Philip C. Bradley Spanish Prize: This prize, established by classmates and friends in memory of Philip C. Bradley '66, is awarded to outstanding students in Spanish language and literature. (1982)

Goodwin French Prize: This prize, established by the Reverend Daniel Raynes Goodwin 1832, A.M. 1835, D.D. 1853, is awarded to the best scholar in French. (1890)

Eaton Leith French Prize: The annual income of a fund, established by James M. Fawcett III '58 in honor of Eaton Leith, professor of Romance languages, is awarded to that member of the sophomore or junior class who, by his or her proficiency and scholarship, achieves outstanding results in the study of French literature. (1962)

Charles Harold Livingston Honors Prize in French: This prize, established by former students of Charles Harold Livingston, Longfellow Professor of Romance Languages, upon the occasion of his retirement, is awarded to encourage independent scholarship in the form of honors theses in French. (1956)

Science

Sumner Increase Kimball Prize: This prize, established by Sumner Increase Kimball 1855, Sc.D. 1891, is awarded to that member of the senior class who has "shown the most ability and originality in the field of the Natural Sciences." (1923)

Sociology and Anthropology

Matilda White Riley Prize in Sociology and Anthropology: This prize, established in honor of Matilda White Riley, Sc.D. '72, Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita, who established the joint Department of Sociology and Anthropology and a tradition of teaching through sociological research, is awarded for an outstanding research project by a major. (1987)

Elbridge Sibley Sociology Prize Fund: Established by Milton M. Gordon '39, the prize is awarded to the member of the senior class majoring in sociology or anthropology who has the highest general scholastic average in the class at the midpoint of each academic year. (1989)

Theater Arts

Abraham Goldberg Prize: Established by Abraham Goldberg, this prize is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of designing or directing. (1960)

Alice Merrill Mitchell Prize: This prize, established by Wilmot Brookings Mitchell 1890, A.M. '07, L.H.D. '38, Edward Little Professor of Rhetoric and Oratory, in memory of his wife, Alice Merrill Mitchell, is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of acting. (1951)

William H. Moody '56 Prize: Established in memory of Bill Moody, who for many years was the theater technician and friend of countless students, this award is presented annually, if applicable, to one or more sophomores, juniors, or seniors having made outstanding contributions to the theater through technical achievements accomplished in good humor. The award should be an appropriate memento of Bowdoin. (1980)

Bowdoin Dance Group Award: An appropriate, inscribed dance memento is awarded annually to an outstanding senior for contributions of dedicated work, good will, and talent, over the course of his or her Bowdoin career, in the lively, imaginative spirit of the Class of 1975, the first graduating class of Bowdoin dancers. (1988)

Scholarship Award for Summer Study in Dance: A monetary award toward tuition costs at an accredited summer program of study in dance is given to a first-year student with demonstrated motivation and exceptional promise in dance technique or choreography, whose future work in dance, upon return, will enrich the Bowdoin program. (1988)

UNDERGRADUATE RESEARCH ASSISTANCE

Surdna Foundation Undergraduate Research Fellowship Program: An undergraduate research fellowship program established in 1959 was renamed in 1968 the Surdna Foundation Undergraduate Research Fellowship Program in recognition of two gifts

of the Surdna Foundation. The income from a fund, which these gifts established, underwrites the program's costs. Fellowships may be awarded annually to highly qualified seniors. Each Surdna Fellow participates under the direction of a faculty member in a research project in which the faculty member is independently interested.

The purpose is to engage the student directly in a serious attempt to extend knowledge. Each project to which a Surdna Fellow is assigned must therefore justify itself independently of the program, and the fellow is expected to be a participant in the research, not a mere observer or helper. The nature of the project differs from discipline to discipline, but all should give the fellow firsthand acquaintance with productive scholarly work. Should the results of the research be published, the faculty member in charge of the project is expected to acknowledge the contribution of the Surdna Fellow and of the program.

Surdna Fellows are chosen each spring for the following academic year. Awards are made on the basis of the candidate's academic record and departmental recommendation, his or her particular interests and competence, and the availability at the College of a research project commensurate with his or her talents and training. Acceptance of a Surdna Fellowship does not preclude working for honors, and the financial need of a candidate does not enter into the awarding of fellowships. Surdna Fellows are, however, obligated to refrain from employment during the academic year. The stipend is \$1,600 for part-time research during the academic year or full-time research in eight weeks of the summer. There are eight awards annually.

Alfred O. Gross Fund: This fund, established by Alfred Otto Gross, Sc.D. '52, Josiah Little Professor of Natural Science, and members of his family, is designed to assist worthy students in doing special work in biology, preferably ornithology.

Fritz C. A. Koelln Research Fund: This fund was established in 1972 by John A. Gibbons, Jr. '64, to honor Fritz C. A. Koelln, professor of German and George Taylor Files Professor of Modern Languages, who was an active member of the Bowdoin faculty from 1929 until 1971. The income from the fund may be awarded annually to a faculty-student research team to support exploration of a topic which surmounts traditional disciplinary boundaries. The purpose of the fund is to encourage broad, essentially humanistic inquiry, and should be awarded with preference given to worthy projects founded at least in part in the humanities.

Edward E. Langbein, Sr., Summer Research Grant: An annual gift of the Bowdoin Parents' Fund is awarded under the direction of the president of the College to undergraduates or graduates to enable the recipients to participate in summer research or advanced study directed toward their major field or lifework. Formerly the Bowdoin Fathers Association Fund, the grant was renamed in 1970 in memory of a former president and secretary of the association.

AWARDS IN ATHLETICS

The Bowdoin College No. 1 Fan Award: Given by the varsity men's hockey players in the Class of 1988, this award is presented annually to a fan of Bowdoin men's hockey, unrelated to a playing member of the team, whose qualities of enthusiasm, loyalty, and support are judged to be especially outstanding. The recipient will be selected by vote of the head coach, the director of athletics, and the members of the team. The recipient's name will be engraved on the permanent trophy, and he or she will receive a replica. (1988)

Leslie A. Claff Track Trophy: This trophy, presented by Leslie A. Claff '26, is awarded "at the conclusion of the competitive year to the outstanding performer in track and field athletics who, in the opinion of the dean, the director of athletics, and the track coach, has demonstrated outstanding ability accompanied with those qualities of character and sportsmanship consistent with the aim of intercollegiate athletics in its role in higher education." (1961)

Annie L. E. Dane Trophy: Named in memory of the wife of Francis S. Dane 1896 and mother of Nathan Dane II '37, Winkley Professor of Latin Language and Literature, the trophy is awarded each spring to a senior member of a varsity women's team who "best exemplifies the highest qualities of character, courage, and commitment to team play." (1978)

Francis S. Dane Baseball Trophy: This trophy, presented to the College by friends and members of the family of Francis S. Dane 1896, is awarded each spring "to that member of the varsity baseball squad who, in the opinion of a committee made up of the dean of the College, the director of athletics, and the coach of baseball, best exemplifies high qualities of character, sportsmanship, and enthusiasm for the game of baseball." (1965)

William J. Fraser Basketball Trophy: This trophy, presented by Harry G. Shulman, A.M. H'71, in memory of William J. Fraser '54, is awarded annually to that member of the basketball team who best exemplifies the spirit of Bowdoin basketball. The recipient is selected by the coach, the director of athletics, and the dean of the College. (1969)

Winslow R. Howland Football Trophy: This trophy, presented to the College by his friends in memory of Winslow R. Howland '29, is awarded each year to that member of the varsity football team who has made the most marked improvement on the field of play during the football season, and who has shown the qualities of cooperation, aggressiveness, enthusiasm for the game, and fine sportsmanship so characteristic of Winslow Howland. (1959)

Elmer Longley Hutchinson Cup: This cup, given by the Bowdoin chapter of Chi Psi Fraternity in memory of Elmer Longley Hutchinson '35, is awarded annually to a member of the varsity track squad for high conduct both on and off the field of sport. (1939)

J. Scott Kelnberger Memorial Ski Trophy: The trophy is presented by the family and friends in honor and memory of J. Scott Kelnberger '83. (1985)

Samuel A. Ladd Tennis Trophy: This trophy, presented by Samuel Appleton Ladd, Jr. '29, and Samuel Appleton Ladd III '63, is awarded to a member of the varsity team who, by his sportsmanship, cooperative spirit, and character, has done the most for tennis at Bowdoin during the year. The award winner's name is inscribed on the trophy. (1969)

Mortimer F. LaPointe Lacrosse Award: This award, given in honor of Coach Mortimer F. LaPointe's 21 seasons as coach of men's lacrosse by his alumni players, is presented to one player on the varsity team, who, through his aggressive spirit, love of the game, and positive attitude, has helped build a stronger team. The coach will make the final selection after consultation with the captains and the dean of students. (1991)

George Levine Memorial Soccer Trophy: This trophy, presented by Lt. Benjamin Levine, coach of soccer in 1958, is awarded to that member of the varsity soccer team exemplifying the traits of sportsmanship, valor, and desire. (1958)

The Maine Track Officials' Trophy: This trophy is given annually by the friends of Bowdoin track and field to that member of the women's team who has demonstrated outstanding qualities of loyalty, sportsmanship, and character during her athletic career at Bowdoin. The recipient of the award is chosen by a vote of the head track coaches and the men's and women's track team. (1989)

Robert B. Miller Trophy: This trophy, given by former Bowdoin swimmers in memory of Robert B. Miller, coach of swimming, is awarded annually "to the Senior who, in the opinion of the coach, is the outstanding swimmer on the basis of his contribution to the sport." Winners will have their names inscribed on the trophy and will be presented with bronze figurines. (1962)

Hugh Munro, Jr., Memorial Trophy: This trophy, given by his family in memory of Hugh Munro, Jr. '41, who lost his life in the service of his country, is inscribed each year with the name of that member of the Bowdoin varsity hockey team who best exemplifies the qualities of loyalty and courage which characterized the life of Hugh Munro, Jr. (1946)

Paul Nixon Basketball Trophy: Given to the College by an anonymous donor and named in memory of Paul Nixon, L.H.D. '43, dean at Bowdoin from 1918 to 1947, in recognition of his interest in competitive athletics and sportsmanship, this trophy is inscribed each year with the name of the member of the Bowdoin varsity basketball team who has made the most valuable contribution to this team through his qualities of leadership and sportsmanship. (1959)

John "Jack" Page Coaches Award: Established as a memorial to John Page of South Harpswell, Maine, through the bequest of his wife, Elizabeth Page, this award is to be presented annually to the individual who, in the opinion of the coaching staff, has distinguished himself through achievement, leadership, and outstanding contributions to the hockey program, the College, and community.

Wallace C. Philoon Trophy: Given by Maj. Gen. Wallace Copeland Philoon, USA, '05, M.S. '44, this trophy is awarded each year to a non-letter winner of the current season who has made an outstanding contribution to the football team. The award is made to a man who has been faithful in attendance and training and has given his best efforts throughout the season. (1960)

Christian P. Potholm II Soccer Award: Given to the College by Christian P. Potholm II '62, DeAlva Stanwood Alexander Professor of Government, and Sandra Q. Potholm, this fund supports annual awards to the male and female scholar/athlete whose hard work and dedication have been an inspiration to the Bowdoin soccer program. Selection of the recipients is decided by the coaching staff. The award is in the form of a plaque inscribed with the recipient's name, the year, and a description of the award. (1992)

Sandra Quinlan Potholm Swimming Trophy: Established by Sandra Quinlan Potholm and Christian P. Potholm II '62, DeAlva Stanwood Alexander Professor of Government, this prize is awarded annually to the male and female member of the Bowdoin swimming teams who have done the most for team morale, cohesion, and happiness. Selection of the recipients is decided by the coaching staff. The award is in the form of a plaque inscribed with the recipient's name, the year, and a description of the award. (1992)

William J. Reardon Memorial Football Trophy: A replica of this trophy, which was given to the College by the family and friends of William J. Reardon '50, is presented

annually to a senior on the varsity football team who has made an outstanding contribution to his team and his college as a man of honor, courage, and ability, the qualities which William J. Reardon exemplified at Bowdoin College on the campus and on the football field. (1958)

Reid Squash Trophy: Established by William K. Simonton '43, this trophy is awarded annually to the member of the squash team who has shown the most improvement. The recipient is to be selected by the coach of the team, the director of athletics, and the dean of the College. (1975)

Colonel Edward A. Ryan Award: Given by friends and family of Colonel Ryan, longtime starter at the College track meets, this award is presented annually to that member of the women's track and field team who has distinguished herself through outstanding achievement and leadership during her four-year athletic career at Bowdoin. (1989)

Harry G. Shulman Hockey Trophy: This trophy is awarded annually to that member of the hockey squad who has shown outstanding dedication to Bowdoin hockey. The recipient is elected by a vote of the coach, the director of athletics, and the dean of the College. (1969)

Lucy L. Shulman Trophy: Given by Harry G. Shulman, A.M. H'71, in honor of his wife, this trophy is awarded annually to the outstanding woman athlete. The recipient is selected by the director of athletics and the dean of the College. (1975)

Society of Bowdoin Women Athletic Award: This award is presented each May to a member of a women's varsity team in recognition of her "effort, cooperation, and sportsmanship." Selection is made by a vote of the Department of Athletics and the dean of students. (1978)

Ellen Tiemer Trophy: This trophy, donated to the women's lacrosse program from funds given in memory of Ellen Tiemer's husband, Paul Tiemer '28, who died in 1988, is to be awarded annually "to a senior or junior woman who is judged to have brought the most credit to Bowdoin and to herself." The recipient is to be selected by a vote of the team and the coach. (1990)

Paul Tiemer Men's Lacrosse Trophy: This award, established in memory of Paul Tiemer '28, is to be presented annually to the player who is judged to have shown the greatest improvement and team spirit over the course of the season. Only one award shall be made in a year, and the recipient is to be selected by a vote of the men's varsity lacrosse team. (1990)

Paul Tiemer, Jr., Men's Lacrosse Trophy: Given by Paul Tiemer '28 in memory of his son, Paul Tiemer, Jr., this trophy is awarded annually to the senior class member of the varsity lacrosse team who is judged to have brought the most credit to Bowdoin and to himself. The recipient is selected by the varsity lacrosse coach, the director of athletics, and the dean of the College. (1976)

Christopher Charles Watras Memorial Women's Ice Hockey Trophy: This trophy is dedicated in the memory of Chris Watras '85, former assistant women's ice hockey coach. The award is presented annually to that member of the Bowdoin women's varsity ice hockey team who best exhibits the qualities of sportsmanship, leadership, commitment, and dedication to her teammates and the sport, on the ice as well as in the community and the classroom. The recipient is selected by the women's varsity ice hockey coach and the director of athletics. Her name is engraved on the permanent trophy and she receives a replica at the team's annual award ceremony. (1989)

Women's Basketball Alumnae Award: A bowl, inscribed with the recipient's name, is given to the player who "best exemplifies the spirit of Bowdoin's Women's Basketball, combining talent with unselfish play and good sportsmanship." The award is presented by Bowdoin alumnae basketball players. (1983)

Women's Ice Hockey Founders' Award: This award is presented to the player who exemplifies the qualities of enthusiasm, dedication, and perseverance embodied in the spirited young women who were paramount in the establishment of Bowdoin women's hockey. The recipient is selected by vote of her fellow players. (1991)

PRIZES IN EXTRACURRICULAR ACTIVITIES

James Bowdoin Cup: This cup, given by the Alpha Rho Upsilon Fraternity, is awarded annually on James Bowdoin Day to the student who in his previous college year has won a varsity letter in active competition and has made the highest scholastic average among the students receiving varsity letters. In case two or more students should have equal records, the award shall go to the one having the best scholastic record during his or her college course. The name of the recipient is to be engraved on the cup. (1947)

Bowdoin Orient Prize: Six cash prizes are offered by the Bowdoin Publishing Company and are awarded each spring to those members of the *Bowdoin Orient* staff who have made significant contributions to the *Orient* in the preceding volume. (1948)

General R. H. Dunlap Prize: The annual income of a fund established by Katharine Wood Dunlap in memory of her husband, Brig. Gen. Robert H. Dunlap, USMC, is awarded to the student who writes the best essay on the subject of "service," in addition to demonstrating personal evidence of service. (1970)

Andrew Allison Haldane Cup: This cup, given by fellow officers in the Pacific in memory of Capt. Andrew Allison Haldane, USMCR, '41, is awarded to a member of the senior class who has outstanding qualities of leadership and character. (1945)

Orren Chalmer Hormell Cup: This cup, given by the Sigma Nu Fraternity at the College in honor of Orren Chalmer Hormell, D.C.L. '51, DeAlva Stanwood Alexander Professor of Government, is awarded each year to a sophomore who, as a first-year student, competed in first-year athletic competition as a regular member of a team, and who has achieved outstanding scholastic honors. A plaque inscribed with the names of all the cup winners is kept on display. (1949)

Lucien Howe Prize: Fifty percent of the income of a fund given by Dr. Lucien Howe 1870, A.M. 1879, Sc.D. '10, is awarded by the faculty to members of the senior class who as undergraduates, by example and influence, have shown the highest qualities of conduct and character. The remainder is expended by the president to improve the social life of the undergraduates. (1920)

Masque and Gown Figurine: A figurine, *The Prologue*, carved by Gregory Wiggin, is presented annually to the author of the prize-winning play in the One-Act Play contest, and is held by the winner until the following contest. (1937)

Masque and Gown One-Act Play Prizes: Prizes are awarded annually for excellence in various Masque and Gown activities, including playwriting, directing, and acting. (1934)

George H. Quinby Award: Established in honor of "Pat" Quinby, for thirty-one years director of dramatics at Bowdoin College, by his former students and friends in

Masque and Gown, this award is presented annually to one or more first-year members of Masque and Gown who make an outstanding contribution through interest and participation in Masque and Gown productions. The recipients are selected by the director of theater, the theater technician, and the president of Masque and Gown. (1967)

Franklin Delano Roosevelt Cup: This cup, furnished by the Bowdoin chapter of Alpha Delta Phi Fraternity, is inscribed annually with the name of that member of the three lower classes whose vision, humanity, and courage most contribute to making Bowdoin a better college. (1945)

Paul Andrew Walker Prize Fund: This fund was established in honor and memory of Paul Andrew Walker '31 by his wife, Nathalie L. Walker. Forty percent of the income of the fund is used to honor a member or members of the *Bowdoin Orient* staff whose ability and hard work are deemed worthy by the Award Committee chosen by the dean of the College. A bronze medal or an appropriate book, with a bookplate designed to honor Paul Andrew Walker, is presented to each recipient. (1982)

MISCELLANEOUS FUNDS

The Applied Environmental Science Fund: This fund, established in 1981 by gifts from Robert C. Porter '34, LL.D. '86, the Ivy Fund, Suburban Propane Gas Corporation, March & McLennan Companies, Inc., and Eberstadt Asset Management, Inc., is to be used to support the research and instructional program of the Marine Research Laboratory and the Hydrocarbon Research Center.

Faculty Development Fund: The income of this fund, established by Charles Austin Cary '10, A.M. H'50, LL.D. '63, is expended each year "for such purpose or purposes, to be recommended by the President and approved by the Governing Boards, as shall be deemed to be most effective in maintaining the caliber of the faculty." These purposes may include, but not be limited to, support of individual research grants, productive use of sabbatical leaves, added compensation for individual merit or distinguished accomplishment, other incentives to encourage individual development of teaching capacity, and improvement of faculty salaries.

Faculty Research Fund: This fund, founded by the Class of 1928 on the occasion of its twenty-fifth anniversary, is open to additions from other classes and individuals. The interest from the fund is used to help finance research projects carried on by members of the faculty.

Sydney B. Karofsky Prize for Junior Faculty: This prize, given by members of the Karofsky family, including Peter S. Karofsky, M.D. '62, Paul I. Karofsky '66, and David M. Karofsky '93, is to be conferred annually by the dean for academic affairs in consultation with the Faculty Affairs Committee on the basis of student evaluations of teaching. Those considered include faculty members in their third year of service whose appointments have been renewed. The award is to be made to an outstanding Bowdoin teacher who "best demonstrates the ability to impart knowledge, inspire enthusiasm, and stimulate intellectual curiosity." In 1993 the award was made to Assistant Professor of Chinese Xiaohong Wen.

Campus and Buildings

BOWDOIN COLLEGE IS LOCATED in Brunswick, Maine, a town of approximately 21,000 population, first settled in 1628, on the banks of the Androscoggin River, a few miles from the shores of Casco Bay. The 110-acre campus is organized around a central quadrangle.

On the north side of the quadrangle is **Massachusetts Hall** (1802), the oldest college building in Maine, which now houses the Departments of English and Philosophy. The building was designated a Registered Historical Landmark in 1971. The entire campus became part of the Federal Street Historic District in 1976. To the left of Massachusetts Hall is **Memorial Hall**, built to honor alumni who served in the Civil War and completed in 1882. Inside Memorial Hall, theatrical productions, lectures, and concerts take place in **Pickard Theater**, a fully equipped proscenium stage that seats 600. There is a smaller experimental theater in the basement.

To the west are the **Mary Frances Searles Science Building** (1894), housing the Departments of Biology and Physics; the **Visual Arts Center** (1975), which contains offices, classrooms, studios, and exhibition space for the Department of Art and Kresge Auditorium, which seats 300 for lectures, films, and performances; the **Walker Art Building** (1894), designed by McKim, Mead & White, which houses the Bowdoin College Museum of Art; and the **Harvey Dow Gibson Hall of Music** (1954). Visible through the southwest corner of the quadrangle is **Hawthorne-Longfellow Hall** (1965), the west side of which is the College's library, including the Special Collections suite on the third floor, and the east side of which houses the main administrative offices for the campus.

On the south side of the quad is **Hubbard Hall** (1903), once the College's library and now the site of the Peary-MacMillan Arctic Museum and Arctic Studies Center, the Departments of History, Geology, Government, and Economics, the Computing Center, and the Susan Dwight Bliss Room, which houses a small collection of rare illustrated books. The back wing of Hubbard Hall is connected to the library by an underground passage and contains stacks and a study room.

On the east side of the quad stands a row of six historic brick buildings: five dormitories (south to north, **Coleman** [1958], **Hyde** [1917], **Appleton** [1843], **Maine** [1808], and **Winthrop** [1822] halls) and **Seth Adams Hall** (1861), a building housing offices and classrooms for the Departments of Mathematics and Computer Science. In the center of this row is the **Chapel**, designed by Richard Upjohn and built between 1845 and 1855, a Romanesque church of undressed granite with twin towers and spires that rise to a height of 120 feet. The Department of Psychology occupies **Banister Hall**, the section of the Chapel building originally used for the College's library and art collection.

Behind the dormitories are two secondary quadrangles divided by a complex comprising **Morrell Gymnasium** (1965), **Sargent Gymnasium** (1912), the **General Thomas Worcester Hyde Athletic Building** (1912), which is currently being converted into a new student center to be named the David Saul Smith Union, the **Curtis Pool Building** (1927), and **Dayton Arena** (1956). **Whittier Field**, **Hubbard Grandstand** (1904), and the **John Joseph Magee Track** are across Sills Drive through the pines behind Dayton Arena.

To the left of this cluster of buildings is the **Hatch Science Library**, the College's newest building, opened for the 1991 spring term; **Parker Cleveland Hall** (1952), the chemistry building, which is named for a nineteenth-century professor who was a pioneer in geological studies; and **Sills Hall** (1950), home to the Departments of Classics, German, Romance Languages, and Russian, an electronic film production laboratory, and the Language Media Center. One wing of Sills Hall, **Smith Auditorium**, seats 210 for films and performances.

To the right of the athletic buildings and the future Smith Union is another quadrangle dominated by the **Moulton Union** (1928), a social, recreational, and service center for the College. It contains dining facilities, several lounges, the reception and information center, a game room, the Moulton Union Bookstore, a travel agency, student mailboxes, and the Events, Career Services, and Student Activities Offices. Also in that quadrangle are **Moore Hall** (1941), a dormitory, and the **Dudley Coe Health Center** (1917). Student health care offices are on the first and second floors of the health center, the Counseling Service is on the third, and the Campus Services offices are in the basement.

Another group of buildings, across College Street on the south side of the campus, includes the College's tallest building and one of its oldest. **Little-Mitchell House** (1827), once a duplex shared by two nineteenth-century professors, was opened in 1970 as a center for African-American studies. Named in honor of Bowdoin's first African-American graduate, the John Brown Russwurm African-American Center houses the offices of the Africana Studies Program, a reading room, and a 1,600-volume library of African and African-American source materials.

Little-Mitchell stands in front of 16-story **Coles Tower** (1964), which provides student living and study quarters, seminar and conference rooms, lounges, and accommodations for official guests of the College. The campus telephone switchboard is located in the lobby of Coles Tower. Connected to the tower are **Wentworth Hall**, a dining hall with smaller meeting and conference facilities on the second floor and Daggett Lounge, a large room where receptions, readings, and meetings are held. **Chamberlain Hall**, the third side of the Coles Tower complex, houses the Admissions Office and the Office of Student Aid.

Off the campus proper are various athletic, residential, and support buildings. The largest of these is the athletic complex two blocks south of Coles Tower. Here are the **William Farley Field House** (1987) and Bowdoin's 16-lane swimming pool, **Pickard Field House** (1937), eight outdoor tennis courts, Pickard Field, the **Observatory**, and 35 acres of playing fields.

Various offices occupy buildings around the perimeter of the campus, many of them in historic houses donated by townspeople and former members of the faculty. The Asian Studies Program and the Department of Religion inhabit **38 College Street**. The **Women's Resource Center**, at 24 College Street, headquarters of the Women's Studies Program and the Bowdoin Women's Association, includes a library and meeting rooms. **Johnson House** (1849), on Maine Street, named for Henry Johnson, a distinguished member of the faculty, and Mrs. Johnson, was designated a registered Historical Landmark in 1975. It contains offices of several student organizations as well as meeting and seminar spaces. **Chase Barn Chamber**, located in the Johnson House ell, contains a small stage and fireplace and is used for small classes, performances, seminars, and conferences. **Ashby House** (1845–55), next to Johnson House, is occupied by the Department of Sociology and Anthropology. **Ham House**, on Bath Street, is headquarters for Bowdoin's Upward Bound Program. **Getchell House**, next door, is home to the Office of Communications. **Rhodes Hall**, formerly the Bath Street Primary School, houses the offices of the Departments of Physical Plant and Security and a few faculty offices. The offices of the *Bowdoin Orient* are located at **12 Cleveland Street**.

The former home of Bowdoin's presidents, **85 Federal Street** (1860) was converted in 1982 for the use of the Development and Annual Giving offices. **Cram Alumni House** (1857), next door to 85 Federal, is the center of alumni activities at Bowdoin. The **Parker Cleveland House** (1806), former residence of Professor Parker Cleveland, at 75 Federal Street, is the president's house.

Fraternity houses and student residences, many of them in historic houses, are scattered in the residential streets around the campus. College-owned student residences include **Baxter House**, designed by Chapman and Frazer and built by Hartley C. Baxter, of the Class of 1878; the **Brunswick Apartments**, on Maine Street, which provide housing for about 100 sophomore students and townspeople; **Burnett House**, built in 1858 and for many years the home of Professor and Mrs. Charles T. Burnett; **10 Cleveland Street**; **30 College Street**; **Copeland House**, formerly the home of Manton Copeland, professor of biology from 1908 until 1947; the **Harpwell Street Apartments** and the **Pine Street Apartments**, designed by Design Five Maine and opened in the fall of 1973; **Wellness House**, 238 Maine Street, formerly the Alpha Rho Upsilon fraternity house; the **Mayflower Apartments**, at 14 Belmont Street, about two blocks from the campus; and the **Winfield Smith House**, named in memory of L. Winfield Smith, of the Class of 1907.

The architecture and history of the campus are thoroughly discussed in *The Architecture of Bowdoin College* (Brunswick: Bowdoin College Museum of Art, 1988), by Patricia McGraw Anderson, which is for sale in the Museum Shop in the Walker Art Building.



LESLIE HOLLANDS

To Harpswell
HARPSWELL ROAD

Pickard Field

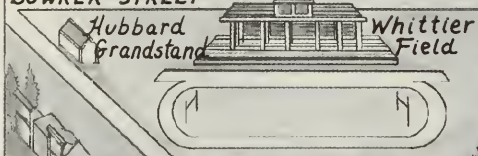
CHAMBERLAIN AVENUE



Smith House

McLELLAN STREET

BOWKER STREET



Whittier Field

Pine Street Apartments



HARPSWELL PL.

Alpha Kappa Sigma

38 College

30 College

Newman Center

COLLEGE STREET

Go Health Center

Moore Hall

Curtis Pool

Dayton Arena

Morrell Gymnasium

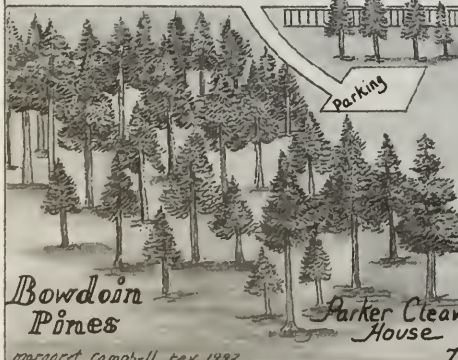
Cleveland Hall

Smith Auditorium

Sills Hall

Hatch Science Library

To Bath



Bowdoin Pines

margaret campbell rev. 1992

85 Federal

Cram Alumni House

Parker Cleveland House

75 Federal

FEDERAL STREET

Copeland House

Rhodes Hall

84-86 Federal

18 Cleveland

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General Information

BOWDOIN is an independent, nonsectarian, coeducational, residential, undergraduate, liberal arts college located in Brunswick, Maine, a town of approximately 21,500 situated close to the Maine coast, 25 miles from Portland and about 120 miles from Boston.

Terms and Vacations: The College holds two sessions each year. The dates of the semesters and the vacation periods are indicated in the College Calendar on pages vi-viii.

Accreditation: Bowdoin College is accredited by the New England Association of Schools and Colleges.

Enrollment: The student body numbers about 1,425 students (53 percent male, 47 percent female; last two classes 56/44 percent and 52/48 percent); about 200 students study away one or both semesters annually; 94 percent complete the degree within five years.

Faculty: Student/faculty ratio 12:1; the equivalent of 130 full-time faculty in residence, 95 percent with Ph.D. or equivalent; 18 athletic coaches.

Geographic Distribution in Entering Class of 1997: New England, 50 percent; Middle Atlantic states, 19 percent; Midwest, 11 percent; West, 11 percent; South, 5 percent; international, 3 percent. Forty-three states and 12 countries are represented. Minority and international enrollment is 17 percent.

Statistics: As of June 1993, 28,389 students have matriculated at Bowdoin College, and 21,281 degrees in courses have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni include 12,782 graduates, 1,915 nongraduates, 92 honorary graduates, 50 recipients of the Certificate of Honor, and 254 graduates in the specific postgraduate program.

Office Hours: In general, the administrative offices of the College are open from 8:30 A.M. to 5:00 P.M., Monday through Friday.

Telephone Switchboard: The College's central telephone switchboard is located in Coles Tower. All College phones are connected to this switchboard. The number is (207) 725-3000.

BOWDOIN COLLEGE
Brunswick, Maine 04011
(207) 725-3000

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