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BOWDOIN COLLEGE

CATALOGUE FOR 1990-1991



BRUNSWICK, MAINE

August 1990

B O W D O I N
C O L L E G E

CATALOGUE FOR 1990-1991

BRUNSWICK, MAINE

August 1990

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, 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.



Text printed on 100% recycled paper.

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College Calendar

1990

189th Academic Year

August 26, Sunday. Rooms ready for occupancy.

August 26–28, Sunday-Tuesday. Orientation.

August 29, Wednesday. Fall semester begins at 8:00 A.M. All students required to be in residence. Registration.

August 29, Wednesday. Opening of College Convocation.

August 30, Thursday. First classes of the fall semester.

October 4–6, Thursday-Saturday. Alumni Council, fall conference.

October 12, Friday. James Bowdoin Day.

October 13, Saturday. Parents Day.

October 19, Friday. Fall vacation begins after the last class.

October 24, Wednesday. Fall vacation ends, 8:00 A.M.

October 26–27, Friday-Saturday. Meetings of the Governing Boards.

October 27, Saturday. Inauguration Weekend.

November 21, Wednesday. Thanksgiving vacation begins after the last class.

November 26, Monday. Thanksgiving vacation ends, 8:00 A.M.

December 6–10, Thursday-Monday. Reading period.

December 11–18, Tuesday-Tuesday. Fall semester examinations.

1991

January 13, Sunday. Rooms ready for occupancy.

January 16, Wednesday. First classes of the spring semester, 8:00 A.M.

February 8–9, Friday-Saturday. Winter's Weekend and Alumni Council.

March 1–2, Friday-Saturday. Meetings of the Governing Boards.

March 15, Friday. Spring vacation begins after the last class.

April 1, Monday. Spring vacation ends, 8:00 A.M.

May 3–4, Friday-Saturday. Ivies Weekend.

May 4–8, Saturday-Wednesday. Reading period.

May 9–16, Thursday-Thursday. Spring semester examinations.

May 24, Friday. Meetings of the Governing Boards.

May 25, Saturday. The 186th Commencement Exercises.

May 30–June 2, **Thursday-Sunday**. Reunion Weekend.

1991**190th Academic Year**

August 25, Sunday. Rooms ready for occupancy.

August 25–27, Sunday-Tuesday. Orientation.

August 28, Wednesday. Fall semester begins at 8:00 A.M. All students required to be in residence. Registration.

August 28, Wednesday. Opening of College Convocation.

August 29, Thursday. First classes of the fall semester.

September 27, Friday. James Bowdoin Day.

September 28, Saturday. Parents Day.

October 11–12, Friday-Saturday. Alumni Council, fall conference.

October 11, Friday. Fall vacation begins after the last class.

October 16, Wednesday. Fall vacation ends, 8:00 A.M.

October 18–19, Friday-Saturday. Meetings of the Governing Boards.

October 19, Saturday. Homecoming.

November 20, Wednesday. Thanksgiving vacation begins after the last class.

November 25, Monday. Thanksgiving vacation ends, 8:00 A.M.

December 5–9, Thursday-Monday. Reading period.

December 10–17, Tuesday-Tuesday. Fall semester examinations.

1992

January 12, Sunday. Rooms ready for occupancy.

January 15, Wednesday. First classes of the spring semester, 8:00 A.M.

January 31–February 1, Friday-Saturday. Winter's Weekend and Alumni Council.

March 6–7, Friday-Saturday. Meetings of the Governing Boards.

March 13, Friday. Spring vacation begins after the last class.

March 30, Monday. Spring vacation ends, 8:00 A.M.

May 1–2, Friday-Saturday. Ivies Weekend.

May 2–6, Saturday-Wednesday. Reading period.

May 7–14, Thursday-Thursday. Spring semester examinations.

May 22, Friday. Meetings of the Governing Boards.

May 23, Saturday. The 187th Commencement Exercises.

May 28–30, **Thursday-Saturday**. Reunion Weekend.

1992**191st Academic Year**

August 30, **Sunday**. Rooms ready for occupancy.

August 30–September 1, **Sunday-Tuesday**. Orientation.

September 2, **Wednesday**. Fall semester begins at 8:00 A.M. All students required to be in residence. Registration.

September 2, **Wednesday**. Opening of College Convocation.

September 3, **Thursday**. First classes of the fall semester.

October 2–3, **Friday-Saturday**. Alumni Council, fall conference.

October 9, **Friday**. James Bowdoin Day.

October 10, **Saturday**. Parents Day.

October 16, **Friday**. Fall vacation begins after the last class.

October 21, **Wednesday**. Fall vacation ends, 8:00 A.M.

October 23–24, **Friday-Saturday**. Meetings of the Governing Boards.

October 24, **Saturday**. Homecoming.

November 25, **Wednesday**. Thanksgiving vacation begins after the last class.

November 30, **Monday**. Thanksgiving vacation ends, 8:00 A.M.

December 10–14, **Thursday-Monday**. Reading period.

December 15–22, **Tuesday-Tuesday**. Fall semester examinations.

1993

January 10, **Sunday**. Rooms ready for occupancy.

January 13, **Wednesday**. First classes of the spring semester, 8:00 A.M.

February 5–6, **Friday-Saturday**. Winter's Weekend and Alumni Council.

March 5–6, **Friday-Saturday**. Meetings of the Governing Boards.

March 12, **Friday**. Spring vacation begins after the last class.

March 29, **Monday**. Spring vacation ends, 8:00 A.M.

April 30–May 1, **Friday-Saturday**. Ivies Weekend.

May 1–5, **Saturday-Wednesday**. Reading period.

May 6–13, **Thursday-Thursday**. Spring semester examinations.

May 21, **Friday**. Meetings of the Governing Boards.

May 22, **Saturday**. The 188th Commencement Exercises.

May 27–30, **Thursday-Sunday**. Reunion Weekend.

1990

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
					1		1	2	3	4	5	6			1	2	3							1							
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8				
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15				
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22				
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	23	24	25	26	27	28	29					
30																					30	31									

1991

JANUARY							FEBRUARY							MARCH							APRIL											
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S					
												1	2																			
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9	7	8	9	10	11	12	13					
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16	14	15	16	17	18	19	20					
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23	21	22	23	24	25	26	27					
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30	28	29	30									
					</																											

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 man, nature, and the interaction of the two and toward the development of a characteristic style of thought which 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 which 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 individuals who teach at the College must strive

constantly to live up to their commitment in their course offerings; likewise, students must have an equal commitment to do so in their course selections. The commitment is a collective one on the part of each member 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 a cloister or monastic retreat from the problems of the world. Rather, the College is a collection of people deeply and passionately 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

BOWDOIN COLLEGE was established by charter from the General Court of Massachusetts on June 24, 1794, after repeated petitions to the commonwealth by citizens who wanted to provide educational opportunity in the District of Maine, then a rapidly growing frontier. Various names for the new institution were considered; the choice of "Bowdoin" was influenced both by a desire to honor the late distinguished governor of the commonwealth, James Bowdoin II, and by intimations received from his son, James Bowdoin III, of a substantial gift toward endowment. Brunswick was selected as the site for the College in 1796, but the erection of a building to house the College was not accomplished until 1802 because it had been difficult to convert into cash the lands that had been granted by the General Court. On September 2 of that year, the Reverend Joseph McKeen was installed as the first president of the College. In his inaugural speech, McKeen called upon those assembled to remember that "literary institutions are founded and endowed for the common good, and not for the private advantage of those who resort to them." On the next day Bowdoin began its active educational life with eight students and one faculty member in addition to the president.

The story of Bowdoin in its early years is an index to its entire history. Its first president was a man of religion and of science. Its first benefactor was a distinguished diplomat, statesman, and gentleman of broad culture; and the inheritance of his extensive library, his scientific instruments, and his fine collection of art established at the College a lasting conviction of the wisdom of strength in these areas of institutional resources. Its original Board was composed of strongly religious men, individually devoted to the Congregational Church as thoroughly as they were to the democratic ideals of a new nation.

Under McKeen and his successor, Jesse Appleton, the curriculum in the early years was rigidly prescribed and strong in the classics. In the field of science, mathematics was soon joined by the study of chemistry and mineralogy. Though small in size, the College had some of the greatest teachers it has known, and among the early graduates were several marked for future fame: for instance, Nathan Lord (1809), for thirty-five years president of Dartmouth; Seba Smith (1818), early humorist; Jacob Abbott (1820), prolific author of the "Rollo" books; William Pitt Fessenden (1823), for a short time President Lincoln's secretary of the treasury; Franklin Pierce (1824), fourteenth president of the United States; Nathaniel Hawthorne and Henry Wadsworth Longfellow, both of the Class of 1825; and John Brown Russwurm, of the Class of 1826, Bowdoin's first black graduate, publisher, and governor of the colony of Maryland in Liberia at the time of his death in 1851.

President William Allen, called in 1819 from the presidency of Dartmouth, introduced modern languages and fought the legal battles necessary to establish

Bowdoin as a private college independent of the new state of Maine. In 1820 the College established a medical school, which in the 101 years of its existence produced many well-trained doctors who practiced in Maine and, to a lesser extent, elsewhere. It is believed that two members of the Class of 1849 were among the first black doctors to receive medical degrees in the United States. In 1921, when the needed clinical facilities and technical equipment had become too complex and expensive for a small institution to supply, it was deemed expedient to discontinue the school.

Bowdoin was established more on faith than endowment, and its finances suffered severely in the aftermath of the panic of 1837. Leonard Woods, a professor of biblical literature at Bangor Theological Seminary, was chosen as president in 1839 and served until 1866. Under his direction, Bowdoin's growth was slow and steady. Social fraternities appeared on the campus in the 1840s, followed by organized athletics in the late 1850s. The *Bowdoin Orient*, which claims to be the oldest continuously published college weekly in the country, appeared first in 1871. As the controversy over slavery worked toward a climax, the home of Professor Smyth was a station of the Underground Railroad for escaped slaves; and here, in another professorial household, Harriet Beecher Stowe wrote the book that was to arouse the conscience of a nation, *Uncle Tom's Cabin*. During the Civil War, the College sent into the service a greater number of men in proportion to its size than any other college in the North.

The twenty years following the Civil War were the most critical in the history of the College. After President Harris's short term of four years (1867-71), Joshua Lawrence Chamberlain, Maine's most distinguished war hero and governor of the state for four terms following his return to civilian life, was elected president. During these two administrations the curriculum was modernized somewhat, but the establishment of an engineering school in 1871 was unsuccessful, since it survived for only ten years. Its most famous graduate was Admiral Robert E. Peary (1877), who led the first expedition to reach the North Pole.

President Chamberlain, for all his great services to the College, the state, and the nation, was unequal to coping with the difficulties now besetting the institution: inadequate endowment and equipment, decreasing enrollment, dissension among the faculty and Boards. Probably no one else connected with either group could have succeeded in the circumstances. Chamberlain's resignation in 1883 provided an opportunity to secure from outside the College the strong leadership imperatively needed.

The inauguration in 1885, after a two-year interregnum, of the Reverend William DeWitt Hyde marks the real beginning of another era. He brought to his task of rejuvenating the institution a boundless physical capacity that was matched by his awareness of a modern and changing world and by scholarly ability that made his national reputation an ornament to Bowdoin. He built the College figuratively and literally, introducing new subjects into the curriculum and enlarging the physical facilities on the campus by over 100 percent. Under him, enrollment increased from 119 in 1885 to 400 in 1915, and the endowment rose

from \$378,273 to \$2,312,868. He emphasized teaching as the responsibility of the College and learning as the responsibility of the students. His vigor permeated the entire life and spirit of the College. It was under President Hyde that Bowdoin's philosophy of its students and of its faculty members as responsible, independent individuals became fixed.

Kenneth C. M. Sills succeeded President Hyde after the latter's death in 1917. He was a natural successor (though not a slavish disciple) of President Hyde. He carried forward his predecessor's program, seeing the College successfully through the upheavals concomitant to two wars. Under him, Bowdoin gradually emerged from being a "country college" to a new and increasingly respected status as a national college. Physical facilities were improved and increased. The faculty grew from 32 to 81; enrollment, from 400 to double that figure; and endowment, from \$2,473,451 to \$12,312,274. Student activities were expanded, and the fraternity system was developed into a cooperative and democratic component of student life.

President Sills was succeeded by James Stacy Coles in the fall of 1952. During his fifteen-year tenure, Bowdoin met the rapidly changing demands of society and students by adopting curricular innovations, expanding the size of its faculty, and improving its facilities at a faster pace than during any comparable period in its history. It was during these years that Bowdoin thoroughly revised its curriculum, extended honors work to all gifted students, introduced independent study courses, initiated an undergraduate research fellowship program, and started its pioneering Senior-Year Program. To accomplish these academic improvements, the College expanded the size of its faculty by over a third, to 109, and raised salaries to a level which has enabled it to continue attracting and retaining outstanding teachers. The value of the College's plant showed a similar dramatic increase. Dayton Arena, Morrell Gymnasium, Chamberlain Hall, Wentworth Hall, Coles Tower, Coleman Hall, Gibson Hall, and Hawthorne-Longfellow Library were constructed. Pickard Theater was constructed in Memorial Hall; Massachusetts Hall, Hubbard Hall, and three dormitories were renovated; and the Moulton Union and Dudley Coe Health Center were enlarged.

President Coles resigned at the end of 1967. Following the acting presidency of Athern P. Daggett, Roger Howell, Jr., a member of Bowdoin's Class of 1958, Rhodes scholar, and chairman of the Department of History, became the tenth president of the College on January 1, 1969. Only thirty-two at the time of his election, Dr. Howell had already achieved international eminence as a scholar of British history.

Under his leadership Bowdoin expanded its curriculum to include Afro-American studies, a major in biochemistry, and courses concerned with the environment. In 1970, it admitted women undergraduates and began an expansion of its enrollment from 950 to 1,350. Other accomplishments included the development of a highly sophisticated computing center, an increase in student representation in the governance of the College, and the successful start of a ten-year, \$37,775,000 fund-raising campaign.

President Howell resigned on June 30, 1978, and returned to full-time teaching at the College. Willard F. Enteman, provost of Union College, was inaugurated Bowdoin's eleventh president on September 22, 1978.

Dr. Enteman resigned on December 31, 1980, and Professor A. LeRoy Greason became Bowdoin's acting president on January 1, 1981. Dr. Greason, a graduate of Wesleyan University, received his graduate degrees from Harvard. He became a member of the Department of English in 1952. Between 1952 and 1981 he also served as dean of students for four years and as dean of the College for nine years.

On October 9, 1981, Dr. Greason was inaugurated the twelfth president of Bowdoin College, the fourth member of the faculty to be named to the office. During Greason's term as president, Bowdoin strengthened its traditional liberal arts curriculum and expanded its offerings to include interdisciplinary programs such as arctic studies, Asian studies, and women's studies. Distribution requirements were reestablished, environmental studies and computer science programs were enhanced, and greater emphasis was placed on developing freshman writing skills.

The recently completed \$56 million Campaign for Bowdoin, which surpassed its goal, received support for thirteen new faculty positions, allocated \$15 million for student scholarships, and provided for major capital improvements and new facilities, including a library expansion project, a new field house and swimming pool, and the initial phase of a new \$27 million science center.

In 1987, Greason was honored by the endowment of an academic chair in his name, to benefit the creative arts at Bowdoin.

On March 3, 1990, the Governing Boards approved the appointment of Robert H. Edwards as thirteenth president of Bowdoin College.

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

John Francis Magee, A.B. (Bowdoin), M.B.A. (Harvard), A.M. (Maine), *Chair*. Elected Overseer, 1972; elected Trustee, 1979. Term expires 1995.

Rosalynne Spindel Bernstein, A.B. (Radcliffe), J.D. (Maine). Elected Overseer, 1973; elected Trustee, 1981. Term expires 1997.

Paul Peter Brountas, A.B. (Bowdoin), B.A., M.A. (Oxford), J.D., LL.B. (Harvard). Elected Overseer, 1974; elected Trustee, 1984. First term expires 1992.

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.

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.

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.

Richard Arthur Wiley, A.B. (Bowdoin), B.C.L. (Oxford), LL.M. (Harvard). Elected Overseer, 1966; elected Trustee, 1981. Term expires 1997.

TRUSTEES EMERITI

- 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.
- Sanford Burnham Cousins**, A.B., LL.D. (Bowdoin). Elected Overseer, 1950; elected Trustee, 1959; elected emeritus, 1974.
- 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.
- William Plummer Drake**, A.M., LL.D. (Bowdoin). Elected Overseer, 1955; elected Trustee, 1970; elected emeritus, 1988.
- Leland Matthew Goodrich**, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Columbia). Elected Overseer, 1961; elected Trustee, 1966; elected emeritus, 1975.
- 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, 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.
- Jotham Donnell Pierce**, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1963; elected Trustee, 1976; elected emeritus, 1984.
- 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.
-
- Peter Charles Barnard**, A.B. (Bowdoin), A.M. (Middlebury), *Secretary*. Elected 1977.

THE BOARD OF OVERSEERS

- Norman Colman Nicholson, Jr.**, A.B. (Bowdoin), *President*. Elected Overseer, 1979. Term expires 1991.
- William Harris Hazen**, A.B. (Bowdoin), J.D. (Harvard), *Vice President*. Elected Overseer, 1981. Term expires 1993.
- Thomas Hodge Allen**, A.B. (Bowdoin), B.Phil. (Oxford), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.
- Peter Charles Barnard**, A.B. (Bowdoin), A.M. (Middlebury), Secretary of the President and Trustees, *ex officio*.
- Walter Edward Bartlett**, A.B. (Bowdoin). Elected Overseer, 1990. First term expires 1996.
- David Pillsbury Becker**, A.B. (Bowdoin), A.M. (New York). Elected Overseer, 1986. First term expires 1992.
- 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. First term expires 1991.
- Thomas Clark Casey**, A.B. (Bowdoin), M.B.A. (Stanford). Elected Overseer, 1989. First term expires 1995.
- Kenneth Irvine Chenault**, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1986. First term expires 1992.
- William Francis Farley**, A.B. (Bowdoin), J.D. (Boston College). Elected Overseer, 1980. Term expires 1992.
- 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.
- Marvin Howe Green, Jr.** Elected Overseer, 1985. First term expires 1991.
- Gordon Francis Grimes**, A.B. (Bowdoin), B.A. (Cambridge), J.D. (Boston). Elected Overseer, 1986. First term expires 1992.
- 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. First term expires 1992.

Reverend Judith Linnea Anderson Hoehler, A.B. (Douglass), M.Div. (Harvard), S.T.D. (Starr King School for the Ministry). Elected Overseer, 1980. Term expires 1992.

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.

Herbert Mayhew Lord, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1980. Term expires 1992.

Diane Theis Lund, A.B. (Stanford), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.

George Calvin Mackenzie, A.B. (Bowdoin), M.A. (Tufts), Ph.D. (Harvard). Elected Overseer, 1986. First term expires 1992.

Cynthia Graham McFadden, A.B. (Bowdoin), LL.B. (Columbia). Elected Overseer, 1986. First term expires 1992.

Campbell Barrett Niven, A.B. (Bowdoin). Elected Overseer, 1986. First term expires 1992.

David Alexander Olsen, A.B. (Bowdoin). Elected Overseer, 1986. First term expires 1992.

Michael Henderson Owens, A.B. (Bowdoin), M.D., M.P.H. (Yale). Elected 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. First term expires 1993.

Peter Metcalf Small, A.B. (Bowdoin). Elected 1988. First term expires 1994.

John Ingalls Snow, A.B. (Bowdoin), M.B.A. (Wharton). Elected Overseer, 1986. First term expires 1992.

Phineas Sprague, A.B. (Bowdoin). Elected Overseer, 1985. First term expires 1991.

Terry Douglas Stenberg, A.B. (Bowdoin), Ed.M. (Boston University), Ph.D. (Minnesota). Elected Overseer, 1983. Term expires 1995.

- 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. First term expires 1993.
- 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.
- Timothy Matlack Warren**, A.B. (Bowdoin). Elected Overseer, 1985. First term expires 1991.
- Russell Bacon Wight, Jr.**, A.B. (Bowdoin). Elected Overseer, 1987. First term expires 1993.
- 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. First term expires 1991.
- Donald Mack Zuckert**, A.B. (Bowdoin), LL.B. (New York University). Elected Overseer, 1987. First term expires 1993.

OVERSEERS EMERITI

- Charles William Allen**, A.B. (Bowdoin), J.D. (Michigan), LL.D. (Bowdoin). Elected Overseer, 1967; elected emeritus, 1976.
- Neal Woodside Allen, Jr.**, A.B. (Bowdoin), A.M., Ph.D. (Harvard). Elected Overseer, 1972; elected emeritus, 1984.
- 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.
- 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.
- Louis Bernstein**, A.B., LL.D. (Bowdoin). Elected Overseer, 1958; elected emeritus, 1973.
- 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.
- 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.
- Honorable Joseph Lyman Fisher**, B.S. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Allegheny), L.H.D. (Starr King School of Ministry). Elected Overseer, 1970; elected emeritus, 1985.
- 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 emeritus, 1989.
- 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.
- 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.
- 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.
- 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.
- 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: Leonard W. Cronkhite, Jr., *Chair*; David P. Becker, Robert H. Edwards, Dennis J. Hutchinson, Diane Lund, Michael H. Owens, Peter D. Relic, Carolyn W. Slayman, T. Douglas Stenberg, Timothy M. Warren, Guy T. Emery (*Faculty Affairs Committee Representative*), one faculty member to be elected from the Curriculum and Educational Policy Committee, Kurt D. Keller '90, Elysia Moschos '92, Craig C. Cheslog '93 (*Alternate*), Gwyn M. Kesler '93 (*Alternate*), Alfred H. Fuchs, *staff liaison*.

Audit: Rosalyne S. Bernstein, *Chair*; Diane Lund, Jean Sampson, John I. Snow, Deborah J. Swiss.

Development: Donald M. Zuckert, *Chair*; Thomas C. Casey, Robert H. Edwards, Frank J. Farrington, C. Lee Herter, Cynthia G. McFadden, L. Robert Porteous, Jr., John I. Snow, Phineas Sprague, Frederick G. P. Thorne, Richard A. Wiley, Helen E. Pelletier '81 (*Alumni*), John L. Howland (*Faculty*), Richard E. Morgan (*Faculty*), Craig C. Cheslog '93, John R. Nicholson, Jr. '91, Gwyn M. Kesler '93 (*Alternate*), Richard F. Seaman, *staff liaison*.

Executive: John F. Magee, *Chair*; Paul P. Brontas, Leonard W. Cronkhite, Jr., Robert H. Edwards, Dennis J. Hutchinson, Donald R. Kurtz, Richard A. Morrell, Norman C. Nicholson, Jr., Donald M. Zuckert, D. Ellen Shuman '76 (*Alumni*), Samuel S. Butcher (*Faculty*), Mitchell S. Zuklie '91.

Financial Planning: Dennis J. Hutchinson, *Chair*; George H. Butcher III, *Vice Chair*; Paul P. Brontas, Robert H. Edwards, William H. Hazen, G. Calvin Mackenzie, Campbell B. Niven, David A. Olsen, Hollis Rafkin-Sax, Deborah J. Swiss, Richard A. Wiley, Sally C. Caras '78 (*Alumni*), Randolph Stakeman (*Faculty*), James E. Ward (*Faculty*), Elysia Moschos '92, Scott J. Wolfson '92, Craig M. Niemann '91 (*Alternate*).

Honors: Norman C. Nicholson, Jr., *Chair*; Rosalyne S. Bernstein, Robert H. Edwards, C. Lee Herter, Judith L. Hoehler, John R. Hupper, G. Calvin Mackenzie, David E. Warren, Mark Wethli (*Faculty*), Kirk R. St. Amant '93, Keri L. Saltzman '93 (*Alternate*).

Investments: Donald R. Kurtz, *Chair*; Theodore H. Brodie, Leonard W. Cronkhite, Jr., Robert H. Edwards, Marvin H. Green, Jr., K. David Hancock, Laurie A. Hawkes, Peter M. Small, Frederick G. P. Thorne, Russell B. Wight, Jr., Barry N. Wish, C. Michael Jones (*Faculty*), Craig M. Niemann '91, James A. Eck II '93 (*Alternate*).

Subcommittee on Social Responsibility: David P. Becker, *Chair*; Paul P. Brontas, Carolyn W. Slayman, Mary Ann Villari, Susan E. Bell (*Faculty*), David J. Vail (*Faculty*), Keri L. Saltzman '93, Ara D. Cohen '93 (*Alternate*).

Nominating: Frank J. Farrington, *Chair*; Rosalyn S. Bernstein, Robert H. Edwards, Campbell B. Niven, David A. Olsen, Frederick G. P. Thorne, D. Ellen Shuman '76 (*Alumni*), Susan E. Bell (*Faculty*), student to be appointed.

Physical Plant: Richard A. Morrell, *Chair*; Walter E. Bartlett, Robert H. Edwards, William Farley, Gordon F. Grimes, John R. Hupper, Judith M. Isaacson, Herbert M. Lord, William G. Wadman, Elizabeth C. Woodcock, Christian P. Potholm II (*Faculty*), A. Raymond Rutan (*Faculty*), Paul S. Faulstich '91, Scott A. Swartz '90.

Student Affairs: Paul P. Broutas, *Chair*; Thomas H. Allen, Tracy J. Burlock, Kenneth I. Chenault, Robert H. Edwards, Leon A. Gorman, Judith L. Hoehler, Jean Sampson, Mary Ann Villari, Sarah F. McMahon (*Faculty*), John H. Turner (*Faculty*), Adele L. Maurer '93, Ara D. Cohen '93, Jane L. Jervis, *staff liaison*.

Subcommittee on Minority Affairs: George H. Butcher III, *Chair*; Richard K. Barksdale, Leon M. Braswell III, Carolyn W. Slayman, Deborah J. Swiss, Russell B. Wight, Jr., Iris W. Davis (*Alumni*), Daniel Levine (*Faculty*), Lynn M. Mastre '91, Carol S. Oh '92, Faith A. Perry, *staff liaison*.

FACULTY REPRESENTATIVES

Trustees: Samuel S. Butcher (1992) and Guy T. Emery (1991).

Overseers: Susan E. Bell (1992), Randolph Stakeman (1992), and one faculty member to be elected by the Curriculum and Educational Policy Committee in September.

STUDENT REPRESENTATIVES

Trustees: Scott B. Phinney '91 and Carol S. Oh '92 (*Alternate*).

Overseers: Jeffrey A. Lewis '92, Craig C. Cheslog '93, and Cheryl B. Schultz '91 (*Alternate*).

ALUMNI COUNCIL REPRESENTATIVES

Executive Committee: D. Ellen Shuman '76.

Trustees: Helen E. Pelletier '81 and Edward E. Langbein, Jr. '57.

Overseers: D. Ellen Shuman '76 and Robert E. Ives '69.

*The president of the College is *ex officio* a member of all standing committees, except the Audit Committee.

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)
- Richard Leigh Chittim**, A.B. (Bowdoin), A.B., A.M. (Oxford), Isaac Henry Wing Professor of Mathematics Emeritus. (1942)
- 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)
- Louis Osborne Coxe**, A.B. (Princeton), Henry Hill Pierce Professor of English Emeritus. (1955)
- Paul Gifford Darling**, A.B. (Yale), A.M. (New York University), Ph.D. (Columbia), Professor of Economics Emeritus. (1956)
- 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)

*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)
- Eaton Leith**, A.B. (Dartmouth), A.M. (Harvard), Professor of Romance Languages Emeritus. (1936)
- Edward Thomas Reid**, Coach in the Department of Athletics Emeritus. (1969)
- Matilda White Riley**, A.B., A.M. (Radcliffe), Sc.D. (Bowdoin), Daniel B. Fayerweather Professor of Political Economy and Sociology Emeritus. (1973)
- Thomas Auraldo Riley**, A.B. (Bowdoin), A.M. (Yale), Ph.D. (Harvard), Professor of German Emeritus. (1939)
- 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)
- Shaheen Ayubi**, A.B. (St. Joseph College, Karachi), A.M. (University of Karachi), Ph.D. (Pennsylvania), Assistant Professor of Government. (1988)
- William Henry Barker**, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Professor of Mathematics. (1975)
- Susan Elizabeth Bell**, A.B. (Haverford), A.M., Ph.D. (Brandeis), Associate Professor of Sociology. (1983)
- Theodore A. Bergren**, A.B. (Princeton), M.T.S. (Harvard Divinity School), Ph.D. (Pennsylvania), Assistant Professor of Religion. (1990)
- Augusta Lynn Bolles**, A.B. (Syracuse), A.M., Ph.D. (Rutgers), Associate Professor of Anthropology. (*On leave of absence.*) (1980)
- Barbara Weiden Boyd**, A.B. (Manhattanville), A.M., Ph.D. (Michigan), Associate Professor of Classics. (1980)
- Winston Brugmans**, B.A., M.A. (Université de Bordeaux), Visiting Assistant Professor of Romance Languages. (1990)
- Franklin Gorham Burroughs, Jr.**, A.B. (University of the South), A.M., Ph.D. (Harvard), Associate Professor of English. (1968)
- 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 and Director of the Curtis Pool. (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 in the fall semester.*) (1972)
- Steven Roy Cerf**, A.B. (Queens College), M.Ph., Ph.D. (Yale), George Lincoln Skolfield, Jr., Professor of German. (1971)
- Ronald L. Christensen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Professor of Chemistry. (1976)
- Diane M. Ciekawy**, B.A. (Pennsylvania State), M.A., M.Phil. (Columbia), Instructor in Anthropology. (1990)
- Dorothy Patricia Coleman**, A.B., A.M. (Northern Illinois), Ph.D. (Pennsylvania), Associate Professor of Philosophy. (*On leave of absence.*) (1984)
- David Collings**, A.B. (Pacific Union), A.M. (California-Riverside), Ph.D. (California-Riverside) A. LeRoy Greason Assistant Professor of English. (*On leave of absence.*) (1987)
- George John Condo**, B.A. (California State), Ph.D. (California-Riverside), Assistant Professor of Psychology. (1990)
- Rachel Ex Connelly**, A.B. (Brandeis), A.M., Ph.D. (Michigan), Assistant Professor of Economics and Dana Faculty Fellow. (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. (*On leave of absence in the fall semester.*) (1962)
- Herbert Randolph Coursen, Jr.**, A.B. (Amherst), A.M. (Wesleyan), Ph.D. (Connecticut), Professor of English. (*On leave of absence in the fall semester.*) (1964)
- John D. Cullen**, A.B. (Brown), Assistant Director of Athletics. (1985)
- Gregory Paul DeCoster**, B.S. (Tulsa), Ph.D. (Texas), Assistant Professor of Economics. (*On leave of absence in the fall semester.*) (1985)
- Chandra Richard deSilva**, B.A. (University of Ceylon, Peradeniya, Sri Lanka), Ph.D. (University of London), Visiting Professor of History and Asian Studies. (1989)
- Sara 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), A.M., Ph.D. (California-San Diego), Assistant Professor of Romance Languages. (*On leave of absence.*) (1987)
- Linda J. Docherty**, A.B. (Cornell), A.M. (Chicago), Ph.D. (North Carolina), Assistant Professor of Art and Dana Faculty Fellow. (*On leave of absence.*) (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), Associate Professor of Mathematics. (*On leave of absence.*) (1977)
- John M. Fitzgerald**, A.B. (Montana), M.S., Ph.D. (Wisconsin), Associate Professor of Economics. (*On leave of absence.*) (1983)
- Liliane P. Floge**, A.B. (City College of New York), M.Phil., Ph.D. (Columbia), Associate Professor of Sociology. (*On leave of absence.*) (1980)
- Paul N. Franco**, B.A. (Colorado College), M.Sc. (London School of Economics), Ph.D. (Chicago), Assistant Professor of Government. (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), Dean of the Faculty and Professor of Psychology. (1962)
- David K. Garnick**, B.A., M.S. (Vermont), Ph.D. (Delaware), Assistant Professor of Computer Science and Dana Faculty Fellow. (1988)
- William Davidson Geoghegan**, A.B. (Yale), M. Div. (Drew), Ph.D. (Columbia), Professor of Religion (*fall semester*); Research Professor of Religion (*spring semester*). (1954)
- Afshin Ghoreishi**, B.S. (Oregon State-Corvallis), M.A. (Marshall), Ph.D. (Kansas State), Assistant Professor of Mathematics. (1990)
- Timothy J. Gilbride**, A.B. (Providence), M.P. (American International), Coach in the Department of Athletics. (1985)
- Edmund T. Gilday**, A.B. (Wisconsin-Madison), A.M. (British Columbia), Assistant Professor of Religion. (*On leave of absence.*) (1987)
- Jane C. Girdham**, B.Mus. (Edinburgh), M.A. (University College, Cardiff, Wales), Ph.D. (Pennsylvania), Assistant Professor of Music. (1989)

- 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), Assistant 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. (*On leave of absence in the spring semester.*) (1964)
- Stephen A. Hall**, B.A. (Corpus Christi College, Oxford), M.Phil. (Warburg Institute, London University), M.A. (Princeton), Instructor in Classics. (1989)
- Barbara S. Held**, A.B. (Douglass), Ph.D. (Nebraska), Associate Professor of Psychology. (1979)
- James Arnold Higginbotham**, B.S., A.M. (Michigan), Instructor in Archaeology in the Department of Classics. (1990)
- Thomas John Hochstettler**, A.B. (Earlham), A.M., Ph.D. (Michigan), Dean for Planning and General Administration and Lecturer in History. (1987)
- James Lee Hodge**, A.B. (Tufts), A.M., Ph.D. (Pennsylvania State), George Taylor Files Professor of Modern Languages. (*On leave of absence in the spring semester.*) (1961)
- John Clifford Holt**, A.B. (Gustavus Adolphus), A.M. (Graduate Theological Union), Ph.D. (Chicago), Professor of Religion. (1978)
- John LaFollette Howland**, A.B. (Bowdoin), Ph.D. (Harvard), Josiah Little Professor of Natural Science and Professor of Biology and Biochemistry. (1963)
- William Taylor Hughes**, B.S., A.M. (Indiana), Ph.D. (Northwestern), Professor of Physics and Astronomy. (1966)
- Arthur Mekeel Hussey II**, B.S. (Pennsylvania State), Ph.D. (Illinois), Professor of Geology. (1961)
- Farhad Jafari**, B.S., M.S., M.A., Ph.D., Ph.D. (Wisconsin-Madison), Assistant Professor of Mathematics. (1989)
- Janice Ann Jaffe**, A.B. (University of the South), A.M., Ph.D. (Wisconsin), Assistant Professor of Romance Languages. (1988)
- Jane L. Jervis**, A.B. (Radcliffe), M.A., M.Phil., Ph.D. (Yale), Dean of the College and Lecturer in History. (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. (California-Berkeley), Instructor in Economics. (1990)
- Michael Jones**, A.B. (Williams), Ph.D. (Yale), Associate Professor of Economics. (1987)
- Susan Ann Kaplan**, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Assistant 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. (1968)
- 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. (1973)
- Jeffrey David Kent**, B.A., M.S. (Slippery Rock), Ph.D. (Illinois), Assistant Professor of Biology. (1990)
- David Israel Kertzner**, A.B. (Brown), Ph.D. (Brandeis), William R. Kenan, Jr., Professor of Anthropology. (*On leave of absence.*) (1973)
- Ann Louise Kibbie**, B.A. (Boston), Ph.D. (California-Berkeley), Assistant Professor of English. (1989)
- Thomas Charles Killion**, B.A. (California-Santa Cruz), M.A., Ph.D. (Stanford), Assistant Professor of History. (1990)
- Jane Elizabeth Knox**, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas-Austin), Associate Professor of Russian. (1976)
- Elroy Osborne LaCasce, Jr.**, A.B. (Bowdoin), A.M. (Harvard), Ph.D. (Brown), Professor of Physics. (1947)
- Edward Paul Laine**, A.B. (Wesleyan), Ph.D. (Woods Hole and Massachusetts Institute of Technology), Assistant Professor of Geology and Director of the Environmental Studies Program. (1985)
- Sally Smith LaPointe**, B.S.Ed. (Southern Maine), Coach in the Department of Athletics. (1973)
- Peter D. Lea**, A.B. (Dartmouth), M.S. (Washington), Ph.D. (Colorado-Boulder), Assistant Professor of Geology. (1988)

- James Spencer Lentz**, A.B. (Gettysburg), A.M. (Columbia), Coordinator of Physical Education and the Outing Club. (1968)
- Daniel Levine**, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science. (*On leave of absence.*) (1963)
- Kenneth Adell Lewallen**, B.S. (Texas A&M), M.A., Ph.D. (Kansas State), Dean of Students and 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), Instructor in Art. (1990)
- Burke O'Connor Long**, A.B. (Randolph-Macon), B.D., A.M., Ph.D. (Yale), Professor of Religion. (*On leave of absence.*) (1968)
- Suzanne B. Lovett**, A.B. (Bowdoin), Ph.D. (Stanford), Assistant Professor of Psychology. (1990)
- Larry D. Lutchmansingh**, A.B. (McGill), A.M. (Chicago), Ph.D. (Cornell), Associate Professor of Art History. (1974)
- Abbes Maazaoui**, License, Maîtrise (Faculté des Lettres, Tunis), Doctorat (Université de Provence, Aix-en-Provence), Assistant Professor of Romance Languages. (1989)
- Irena S. M. Makarusha**, B.A. (St. John's), M.A., Ph.D. (Boston), Assistant Professor of Religion. (1990)
- Timothy J. Maloney**, A.B. (Wisconsin-Milwaukee), A.M., Ph.D. (Wisconsin-Madison), Assistant Professor of Economics. (1987)
- Janet Marstine**, B.S. (Lehigh), M.A. (Minnesota), Instructor in Art History. (1990)
- Janet Marie Martin**, A.B. (Marquette), A.M., Ph.D. (Ohio State), Assistant 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)
- Martha E. May**, B.A. (Virginia Commonwealth), M.A., Ph.D. (New York-Binghamton), Assistant Professor of Women's Studies and History and Director of the Women's Studies Program. (1989)
- Dana Walker Mayo**, B.S. (Massachusetts Institute of Technology), Ph.D. (Indiana), Charles Weston Pickard 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)
- James Wesley McCalla**, B.A., B.M. (Kansas), M.M. (New England Conservatory), Ph.D. (California-Berkeley), Assistant Professor of Music. (1985)
- Craig Arnold McEwen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Daniel B. Fayerweather Professor of Political Economy and Sociology. (*On leave of absence in the spring semester.*) (1975)
- Charles Douglas McGee**, B.S., A.M. (Northwestern), Ph.D. (Harvard), Professor of Philosophy. (1963)
- John McKee**, A.B. (Dartmouth), A.M. (Princeton), Associate Professor of Art. (1962)
- Kevin James McKillop, Jr.**, B.A. (Flagler), M.S., Instructor in Psychology. (1990)
- Sarah Francis McMahon**, A.B. (Wellesley), Ph.D. (Brandeis), Associate Professor of History. (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)
- Jeffrey Karl Nagle**, A.B. (Earlham), Ph.D. (North Carolina), Associate Professor of Chemistry. (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. (1987)
- Peter Alan Ohring**, B.S. (Hebrew University-Jerusalem), Ph.D. (Colorado-Boulder), Assistant Professor of Mathematics. (1990)
- Clifton Cooper Olds**, A.B. (Dartmouth), A.M., Ph.D. (Pennsylvania), Edith Cleaves Barry Professor of the History and Criticism of Art. (1982)
- Michael King Ong**, B.S. (University of the Philippines), M.A., M.S., Ph.D. (New York-Stony Brook), Assistant Professor of Mathematics. (*On leave of absence.*) (1984)

- David Sanborn Page**, B.S. (Brown), Ph.D. (Purdue), Professor of Chemistry and Biochemistry. (1974)
- Gayle Renee Pemberton**, A.B. (Michigan), A.M., Ph.D. (Harvard), Director of Multicultural Affairs and Lecturer in the Department of English. (*On leave of absence.*) (1986)
- Carey Richard Phillips**, B.S. (Oregon State), M.S. (California-Santa Barbara), Ph.D. (Wisconsin, Madison), Assistant Professor of Biology. (1985)
- Jananne Kay Phillips**, A.B. (Washburn), A.M. (Brown), Instructor in Sociology. (1990)
- 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)
- Stephen D. Prodnuk**, B.S. (Utah), Dreyfus Visiting Instructor in Chemistry. (1990)
- Lance Arthur Ramshaw**, B.A. (Oberlin), M. Div. (Episcopal Divinity School), M.S., Ph.D. (Delaware-Newark), Assistant Professor of Computer Science. (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)
- John Cornelius Rensenbrink**, A.B. (Calvin), A.M. (Michigan), Ph.D. (Chicago), Research Professor of Government. (1961)
- Rosemary Roberts**, A.B. (University of Reading), M.Sc., Ph.D. (University of Waterloo), Assistant Professor of Mathematics. (1984)
- Guenter Herbert Rose**, B.S. (Tufts), M.S. (Brown), Ph.D. (California-Los Angeles), Associate Professor of Psychology. (*On leave of absence.*) (1976)
- Daniel Walter Rossides**, B.A., Ph.D. (Columbia), Professor of Sociology. (1968)
- James David Roth**, B.A. (Pennsylvania State), M.A. (Ohio), M.A. (William and Mary), Ph.D. (Harvard), Assistant Professor of Psychology. (1990)
- Lynn Margaret Ruddy**, B.S. (Wisconsin-Oshkosh), Assistant Director of Athletics. (1976)
- Giulianella Ruggiero**, D.L.F. (University of Rome), Instructor in Romance Languages. (1988)

- Abram Raymond Rutan**, A.B. (Bowdoin), M.A.F. (Yale), Director of Theater in the Department of Theater Arts. (1955)
- Miyako Satoh**, B.A. (Doshisha University, Japan), B.A. (Amherst), M.A. (Chicago), Instructor in Japanese Language and Literature in the Asian Studies Program. (1989)
- Paul Eugene Schaffner**, A.B. (Oberlin), Ph.D. (Cornell), Associate Professor of Psychology. (*On leave of absence.*) (1977)
- George M. Schmiedeshoff**, B.S. (Bridgeport), M.S., Ph.D. (Massachusetts-Amherst), Visiting Assistant Professor of Physics. (1987)
- Elliott Shelling Schwartz**, A.B., A.M., Ed.D. (Columbia), Professor of Music. (*On leave of absence in the spring semester.*) (1964)
- Carl Thomas Settlemyre**, B.S., M.S. (Ohio State), Ph.D. (North Carolina State), Associate Professor of Biology and Chemistry. (*On leave of absence.*) (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)
- William Davis Shipman**, A.B. (Washington), A.M. (California-Berkeley), Ph.D. (Columbia), Research Professor of Economics. (1957)
- Patricia Angela Sieber**, S.F.M.C. (Kantonsschule Stadelhofen, Zurich), M.A. (California-Berkeley), Instructor in Chinese Language and Literature in the Asian Studies Program. (1990)
- Lawrence Hugh Simon**, A.B. (Pennsylvania), A.B. (Oxford), M.A./B.A. (Cambridge), Ph.D. (Boston University), Assistant Professor of Philosophy. (1990)
- 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. (*On leave of absence.*) (1972)
- David Neel Smith**, A.B. (Harvard), A.M., Ph.D. (California-Berkeley), Assistant Professor of Archaeology in the Department of Classics. (*On leave of absence.*) (1987)
- G. E. Kidder Smith, Jr.**, A.B. (Princeton), Ph.D. (California-Berkeley), Associate Professor of History. (*On leave of absence in the spring semester.*) (1981)
- Therese Smith**, B.A., B.M. (University College, Dublin), M.A., Ph.D. (Brown), Assistant Professor of Music. (1989)

- 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), Director of the Afro-American Studies Program and Associate Professor of History. (1978)
- Allen Steinberg**, B.A. (Northwestern), M.A., M.Phil., Ph.D. (Columbia), Assistant Professor of History. (1990)
- William Lee Steinhart**, A.B. (Pennsylvania), Ph.D. (Johns Hopkins), Associate Professor of Biology. (1975)
- Elizabeth Stemmler**, B.S. (Bates), Ph.D. (Indiana), Assistant Professor of Chemistry. (1988)
- Rajani Sudan**, B.A., M.A., (Cornell), Instructor in English. (1990)
- Françoise Dupuy Sullivan**, Maitrise (Université de Bordeaux), M.A. (Washington, Seattle), Ph.D. (California-Irvine), Assistant Professor of Romance Languages. (1985)
- Dennis J. Sweet**, B.A. (Indiana-Bloomington), M.A., Ph.D. (Iowa), Assistant Professor of Philosophy. (1989)
- Dale Syphers**, B.S., M.Sc. (Massachusetts), Ph.D. (Brown), Assistant Professor of Physics. (1986)
- Susan L. Tananbaum**, B.A. (Trinity), M.A., M.A., (Brandeis), Instructor in History. (1990)
- Clifford Ray Thompson, Jr.**, A.B., A.M., Ph.D. (Harvard), Professor of Romance Languages. (1961)
- Peter Keim Trumper**, A.B. (St. Olaf), Ph.D. (Minnesota), Assistant Professor of Chemistry and Dana Faculty Fellow. (*On leave of absence.*) (1985)
- 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. (*On leave of absence.*) (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. (1970)

- June Adler Vail**, A.B. (Connecticut), M.A.L.S. (Wesleyan), A. LeRoy Greason Assistant Professor of Dance in the Department of Theater Arts and Director of the Dance Program. (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. (*On leave of absence.*) (1984)
- James Edward Ward**, 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), Associate 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), Associate Professor of History. (1988)
- Mark Christian Wethli**, B.F.A., M.F.A. (University of Miami), Associate Professor of Art. (1985)
- Nathaniel Thoreau Wheelwright**, B.S. (Yale), Ph.D. (Washington), Assistant Professor of Biology. (1986)
- Jean Yarbrough**, A.B. (Cedar Crest College), A.M., Ph.D. (New School for Social Research), Professor of Government and Legal Studies. (1988)

COMMITTEES OF THE FACULTYLUCIE G. TEEGARDEN, *Faculty Clerk*

Academic Computing Center: Mr. Butcher, *Chair*; the Dean of Planning, the Manager of Academic Computing, Ms. Roberts, Mr. Schmiedeshoff, and Ms. Weigle. Two undergraduates to be named.

Administrative: The President, *Chair*; the Dean of the College, the Dean of Students, the College Physician, Mr. Cullen, Ms. Kibbie, Messrs. Sweet and Wethli. Undergraduates: Ara D. Cohen '93, Richard P. Ginsberg '93, and Daniel L. Rosenthal '92.

Admissions: Ms. McMahan, *Chair*; the Dean of the College, the Director of Admissions, Ms. Girdham, Messrs. Nagle, Wheelwright, and Vail. Undergraduates: Julie R. Albright '91 and Mark C. Schulze '93. *Alternate:* Michele L. Cobb '93.

Afro-American Studies: Mr. Goldstein, *Chair*; the Director of Multicultural Affairs, the Director of Afro-American Studies, Ms. Goodridge, Messrs. Karl and McEwen (*fall semester*), Ms. Smith, and Mr. Ward. Five undergraduates to be named.

Asian Studies: Mr. Olds, *Chair*; the Chair of the Asian Studies Program, Messrs. deSilva, Holt, and Springer, and Ms. Sullivan.

Athletics: Mr. Johnson, *Chair*; the Dean of the College, the Director of Athletics, Messrs. Morgan and Redwine, Ms. Ruddy, and Ms. Stemmler. Undergraduates: Joseph W. Cusack, Jr. '92 and Jeffrey A. Lewis '92. *Alternate:* Scott J. Wolfson '92.

Committee on Committees: Mr. Stakeman (1992), *Chair*; the Dean of the Faculty, Mr. Butcher (1993), Ms. Connelly (1993), Ms. Reizbaum (1991), and Mr. Springer (1991). One person to be elected in the fall.

Curriculum and Educational Policy: The President, *Chair*; Mr. Page, *Secretary*; the Dean of the College, the Dean of the Faculty, Ms. Boyd, Mr. Cerf, Ms. Kaplan, Ms. J. Martin, and Mr. Tucker. Undergraduates: Julie R. Albright '91 and Amy E. Sanford '93. *Alternate:* Lynne M. Mastre '91.

Environmental Studies: Mr. Burroughs, *Chair*; the Director of Environmental Studies, Mr. Freeman, Ms. Johnson, Messrs. Miller, Potholm, and Syphers. Three undergraduates to be named.

Faculty Affairs: Mr. Emery (1992), *Chair*; the Dean of the Faculty, Mr. Christensen (1993), Ms. Dickey (1992), Ms. Kaster (1991), Ms. O'Connor (1991), Ms. Wegner (1991), and Mr. Wells (1993).

Faculty Research: Ms. Reizbaum, *Chair*; the Dean of the Faculty, Ms. Connelly (Faculty Development Fund), Mr. Garnick (Course Development Fund), Ms.

Held (Faculty Research Fund), Messrs. Holt (Research Fellowships) and Phillips (Koelln Research Fund; Undergraduate Instructional Fellowships; Langbein, Sr., Summer Research Fellowships; and Surdna Foundation Undergraduate Research Fellowship Program). *Alternates*: Messrs. Morgan and Steinhart.

Financial Aid and Awards: The Dean of the College, *Chair*; the Director of Student Aid, Messrs. Greenlee, Grobe, LaCasce, McGee, Nunn, and Pot-holm.

Grievance (Sex): Mr. Stakeman, *Chair*; Ms. Diehl, Mr. Redwine, Ms. Watson, and Mr. Wethli. *Alternates*: Ms. Satoh and Mr. Syphers.

Human and Animal Research: Ms. Bell, *Chair*; the Dean of the Faculty, Messrs. Howland, Lea, McKee, and Rossides, and Herbert Paris and R. S. Youmans, D.V.M.

Latin American Studies: Mr. John Turner, *Chair*; Ms. Jaffe, Messrs. Steinhart and Wells.

Lectures and Concerts: Mr. Lutchmansingh, *Chair*; the Dean of the College, Messrs. McCalla and Nyhus, Ms. Knox, Messrs. Jafari and Simon. Undergraduates: Margarita Z. David '93 and Heather M. St. Peter '93. *Alternate*: Richard P. Ginsberg '93.

Library: Ms. Yarbrough, *Chair*; the Librarian, Messrs. Garnick and Hall, Ms. Stemmler, and Mr. Watterson. Undergraduates: Christopher C. Leighton '93 and Irene I. Wu '93.

Oversight Committee on Multicultural Affairs: The Director of Multicultural Affairs, *Chair*; the Minority Counselor, the Dean of the College, Ms. Kibbie, Ms. Satoh, Messrs. Steinhart, Ward, and Wheelwright. Undergraduates: Carol S. Oh '92 and Irene I. Wu '93.

Recording: The Dean of the College, *Chair*; the Dean of Students, the Registrar, Mr. Ambrose, Ms. Ayubi, Mr. Greenlee, and Ms. Roberts. Undergraduates: Julie R. Albright '91 and Richard P. Ginsberg '93. *Alternate*: Scott J. Wolfson '92.

Studies in Education: Mr. Barker, *Chair*; Ms. P. Martin, Ms. Sharpe, Ms. Sullivan, Mr. Syphers, and Ms. Vail.

Student Activities Fee: Mr. Thompson, *Chair*; the Student Activities Coordinator, Ms. Vail, and Mr. Vandersea. Undergraduates: Jeffrey A. Lewis '92, Robert H. Smith '91, and Wendy L. Williams '93. *Alternate*: Craig C. Cheslog '93.

Student Awards: Mr. Corish, *Chair*; Messrs. DeCoster and Hussey, Ms. Ruggiero, and Ms. Sharpe.

Student Life: The Dean of Students, *Chair*; the Director of the Moulton Union, Ms. May, Messrs. Slovenski and John Turner, and Ms. Yarbrough. Undergraduates: Jennifer A. Davis '92, Khurram Dastgir-Khan '93, Brendan P. Rielly '92, and Daniel L. Rosenthal '92. *Alternate:* Richard P. Ginsberg '93.

Women's Studies: Ms. Diehl, *Chair*; Director of Women's Studies (*ex officio*), Ms. Dickinson, Ms. Jaffe, Mr. Litvak, Mr. Simon, and Ms. Weigle. Undergraduates: Cara E. Maggioni '91 and Johannah E. Burdin '92.

Adjunct Faculty

- Marie-France Anglade**, (Université de Clermont II), Teaching Fellow in French.
- Lauren Bartlett**, B.S. (Trinity), M.S. (Southern Maine), Laboratory Instructor in Chemistry.
- Rene L. Bernier**, B.S. (Maine), Laboratory Instructor in Chemistry.
- Jonathan O. Blumberg**, B.S. (Maine-Orono), Laboratory Instructor in Biology.
- Fabienne Brigaud**, (Université de Clermont II), Teaching Fellow in French.
- Pamela Jean Bryer**, B.S., M.S. (Rensselaer Polytechnic Institute), Laboratory Instructor in Biology.
- Norman Chonacky**, B.A. (John Carroll University), Ph.D. (Wisconsin), Research Associate in Physics.
- Norman P. Cohen**, A.B. (Bowdoin), J.D. (Harvard), Visiting Lecturer in Government. (*Fall semester.*)
- Stephen Crawford**, B.A. (Cornell), M.B.A. (Wharton), Ph.D. (Columbia), Research Associate in Sociology.
- John R. Cross**, A.B. (Bowdoin), M.A. (Massachusetts), Research Associate in Anthropology.
- Beverly Ganter DeCoster**, B.S. (Dayton), Laboratory Instructor in the Department of Chemistry.
- Orlando E. Delogu**, B.S. (Utah), M.S., J.D. (Michigan), Visiting Professor of Environmental Studies. (*Fall semester.*)
- Jennifer Somerville Edwards**, A.B. (Bowdoin), Studio Art Fellow.
- Geoffrey F. Evans**, B.A. (Stanford), M.Ed. (Pennsylvania State), Ph.D. (Minnesota), Visiting Lecturer in Psychology. (*Fall semester.*)
- Paulette Messier Fickett**, A.B. (Maine-Presque Isle), Laboratory Instructor in Chemistry.
- Peter Frewen**, B.A. (Pomona), M.A. (Queens College), M. Phil. (Yale), Director of Chorale in the Department of Music.
- Judith Cooley Foster**, A.B. (Brown), A.M. (Rhode Island), Laboratory Instructor in Chemistry and Director of Laboratories.

- Alan Garfield**, A.B. (New Hampshire), Laboratory Instructor in Biology. (*On leave of absence.*)
- Edward Smith Gilfillan III**, A.B. (Yale), M.Sc., Ph.D. (British Columbia), Lecturer in Environmental Studies and Adjunct Professor of Chemistry.
- Christopher C. Glass**, A.B. (Haverford), M.Arch. (Yale), Visiting Lecturer in Art. (*Spring semester.*)
- Daniel Hurlin**, B.A. (Sarah Lawrence), Visiting Artist and Lecturer in the Division of Dance in the Department of Theater Arts. (*Fall semester.*)
- Gwyneth Jones**, Teaching Fellow in Dance Performance.
- Angela Michele Leonard**, A.B. (Radcliffe), M.L.S. (Vanderbilt), M.Phil. (George Washington), Consortium Dissertation Fellow and Lecturer in History.
- Lian Shu Li**, B.A. (Tsing Hua University), M.Phil. (Columbia), M.A. (Beijing Foreign Languages Institute), Mellon Fellow in Russian.
- Lowell W. Libby**, B.A., (Colby), M.Ed. (Maine), Associate in Education.
- Ismael Cumbreza Lopez**, (University of Seville), Teaching Fellow in Spanish.
- Mariko Onuki**, B.A. (Gakushin University, Tokyo), M.A. (Illinois-Champaign), Lecturer in Japanese in the Asian Studies Program.
- Rosa Pellegrini**, Diploma Magistrale (Istituto Magistrale "Imbriani" Avellino), Lecturer in Italian. (*On leave of absence in the fall semester.*)
- Leonardo Peusner**, BSEE (Massachusetts Institute of Technology), Ph.D. (Harvard), Research Associate in Biology.
- Barbara N. Porter**, B.A. (Swarthmore), Ph.D. (Pennsylvania), Visiting Lecturer in History. (*Fall semester.*)
- David L. Roberts**, A.B. (Bowdoin), Ph.D. (Case Western Reserve), Teaching Associate in Physics.
- Michael Paul Roderick**, A.B. (Maine), Technical Director in the Department of Theater Arts.
- Paul Sarvis**, Teaching Fellow in Dance Performance.
- Sara J. Sawyer**, B.S. (William and Mary), Laboratory Instructor in Biology.
- Birgit Schott**, (Johannes Gutenberg Universitat, Mainz am Rhein), Teaching Fellow in German.
- Leah G. Shulsky**, M.A. (Moscow Pedagogical Institute), Teaching Fellow in Russian.

- Amy Weinstein**, B.A. (New College of the University of the South), M.A., Ph.D. (New York-Stony Brook), Research Associate in the Neuroscience Program.
- Xiaohong Wen**, B.A. (Peking Languages Institute, Beijing), M.A., Ph.D. (Kansas-Lawrence), Lecturer in Chinese.
- Mary-Agnes Wine**, A.B., A.M. (Mount Holyoke), Laboratory Instructor in Biology. (*Spring semester.*)

Officers of Administration

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.

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.

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.

Laurent Conrad Pinette, Director of Dining Service Emeritus.

Geoffrey Stanwood, A.B. (Bowdoin), Assistant to the President Emeritus.

Kathryn Drusilla Fielding Stemper, A.B. (Connecticut College), Secretary to the President Emerita.

An officer of administration is customarily designated emeritus or emerita if he or she, upon retirement, has served the College twenty-five years.

GENERAL ADMINISTRATION

Robert Hazard Edwards, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Carleton), President of the College.

Alfred Herman Fuchs, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Dean of the Faculty.

Thomas John Hochstettler, A.B. (Earlham), M.A., Ph.D. (Michigan), Dean for Planning and General Administration.

Jane L. Jervis, A.B. (Radcliffe), A.M., M. Phil., Ph.D. (Yale), Dean of the College.

Richard F. Seaman, B.A. (Oberlin), M.A. (Western Reserve), Vice President for Development.

Janet B. Smith, A.B. (Wells), A.M., M.Liberal Studies (Boston University), Assistant to the President, Affirmative Action Officer.

ACCOUNTING OFFICE

Pauline Paquet Farr, Gift and Fund Accountant.

Lori Ann Keeley, B.A. (Rutgers), Investment Accountant.

Thomas Joseph Mallon, Accounting Office Manager.

Michelle A. McDonough, A.B. (Keuka College), Chief Cashier.

Marilyn Nelson McIntyre, A.B. (Grinnell), M.P.A. (Pennsylvania State), General Ledger Supervisor.

Martin F. Szydlowski, B.S. (Providence College), Director of General Accounting.

ADMISSIONS OFFICE

William Robert Mason III, A.B. (Bowdoin), Director.

Leon Melvin Braswell III, A.B. (Massachusetts), Assistant Director.

Heidi Jean Heal, A.B. (Bowdoin), Assistant Director.

Janet Anne Lavin, A.B. (Williams), M.S. (Stanford), Associate Director.

Mitchell Alan Price, A.B. (Bowdoin), Admissions Counselor.

Sammie Timothy Robinson, A.B. (Bowdoin), A.M. (Smith), Associate Director.

Anne Wohltman Springer, A.B. (Bowdoin), Associate Director.

ALUMNI RELATIONS

Donald B. Snyder, Jr., A.B. (Bowdoin), Director of Alumni Relations.

Martha J. Adams, Assistant Director of Alumni Relations.

ANNUAL GIVING

Albert R. Smith II, A.B. (Trinity), Director of Annual Giving.

Betty L. Andrews, Assistant Director of Annual Giving.

Todd M. Greene, A.B. (Bowdoin), Development Office Intern.

Martha A. Ryan, A.B. (Bowdoin), Associate Director of Annual Giving.

ATHLETICS

Sidney John Watson, B.S. (Northeastern), Director of Athletics.

John D. Cullen, A.B. (Brown), Assistant Director.

Lynn M. Ruddy, B.S. (Wisconsin-Oshkosh), Assistant Director.

AUDIOVISUAL SERVICES

James Alan Clayman, Technician.

BETHEL POINT MARINE RESEARCH STATION

Edward Smith Gilfillan III, A.B. (Yale), M.S., Ph.D. (British Columbia),
Director.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

Anne Underwood, A.B. (The College of Wooster), M.S. (Ohio State), Director.

CAREER SERVICES

Lisa B. Tessler, A.B. (Bowdoin), Ed.M. (Harvard), Director.

Susan P. Gates, B.A. (Vanderbilt), Graduate Intern.

Susan Deland Livesay, A.B. (Smith), Associate Director.

Ann Semansco Pierson, A.B. (Bowdoin), Director of Programs in Teaching and
Coordinator of Bowdoin Active in Community Service.

Laurel A. Smith, B.A. (Connecticut), M.S. (Northeastern), Career Development
Counselor.

CENTRALIZED DINING SERVICE

Mary Lou McAteer Kennedy, R.D., B.S. (Vermont), A.M. (Framingham State), Director.

Kenneth Cardone, Executive Chef.

Orman Hines, Purchasing Agent.

Jon Wiley, Operations Manager, Moulton Union.

CHEMISTRY LABORATORIES

Judith Cooley Foster, A.B. (Brown), M.S. (Rhode Island), Coordinator of Laboratories.

Pamalee J. Labbe, Administrative Assistant/Summer Programs Coordinator.

Walter E. Lonsdale, Stockroom Supervisor.

CHILDREN'S CENTER

Bette Spettel, B.S., M.S. (Wheelock College), Director.

Heidi R. Davidson, B.S. (Wheelock College), Lead Early Childhood Caregiver.

Janet E. Nickerson, B.S. (Maine), Lead Early Childhood Caregiver.

Melissa S. Pettingill, B.S. (Maine), Lead Early Childhood Caregiver.

DUDLEY COE HEALTH CENTER

Roy Edward Weymouth, Jr., A.B. (Bowdoin), M.D. (Tufts), College Physician.

Robin Lewis Beltramini, B.A. (College of the Atlantic), M.S. (Pace), Gynecologic Nurse Practitioner.

Ian F. M. Buchan, A.B. (New Hampshire), Physician's Assistant.

COMPUTING CENTER

Myron Whipple Curtis, A.B. (Bowdoin), A.M. (California-Los Angeles), Director.

Harry J. Hopcroft, Jr., A.B. (Brown), M.B.A. (Adelphi), Systems Manager/Network Manager.

Susan T. Kellogg, B.S. (Southern Maine), Administrative Applications Coordinator.

Thaddeus Tibbetts Macy, A.B. (Maine), Manager of Systems and Communications.

Shelby C. (Pete) Miller, A.B. (Harvard), Manager of Academic Computing

Mark Ingwald Nelsen, A.B. (California-Berkeley), Special Projects Engineer.

Carol Arlita Flewelling O'Donnell, A.B. (Maine), Administrative Applications and Training Coordinator.

Paul C. Petersen, B.S. (Northeastern), Administrative Applications Coordinator.

Stephen G. Smith, A.B. (Colby), M.B.A. (Maine), Manager of Administrative Computing.

COUNSELING SERVICE

Robert C. Vilas, A.B., M.Ed. (St. Lawrence), Ph.D. (Iowa), College Counselor.

Mary E. McCann, B.A. (Southern Maine), M. Ed. (Harvard), College Counselor

DEAN OF STUDENTS OFFICE

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.

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.

Robert S. Stuart, A.B. (Bowdoin), Advisor to Fraternities.

Barbara J. Trudeau, B.A. (Massachusetts-Amherst), First-Year Advisor.

OFFICE OF DEVELOPMENT

William A. Torrey III, B.A., M.S. in Ed. (Bucknell), Director of Development.

Katharine B. Bunge, A.B. (Brown), M.A. (George Washington), Development Writer.

Stephen P. Hyde, B.A., J.D. (Maine), Director for Corporate and Foundation Relations.

William P. Kunitz, B.S. (Michigan State), Director of Development Informa-

tion Systems.

Katherine L. Mills, A.B. (Smith), Assistant Director of Prospect Research.

Susan R. Moore, A.B. (Maine), M.L.S. (Syracuse), Director of Prospect Research.

OFFICE OF THE VICE PRESIDENT FOR DEVELOPMENT

Mary C. Bernier, Assistant to the Vice President for Development.

Henry Jay Burns, Jr., A.B. (Bowdoin), Acting Editor, *Bowdoin Magazine*. (Fall semester.)

Charles C. Calhoun, A.B. (Virginia), B.A., M.A. (Oxford), Editor, *Bowdoin Magazine*.

Pamela D. Phillips, A.B. (Princeton), Director of Reunion and Parents Giving.

Harry K. Warren, A.B. (Pennsylvania), Secretary of the College.

ENVIRONMENTAL STUDIES

Helen Koulouris, B.S. (Maine), Program and Course Coordinator.

EVENTS OFFICE

Anne Underwood, A.B. (The College of Wooster), M.S. (Ohio State), Director of Summer and Special Programs.

Cynthia P. Wonson, Events Coordinator.

HAWTHORNE-LONGFELLOW LIBRARY

Arthur Monke, A.B. (Gustavus Adolphus), M.S. in L.S. (Columbia), Librarian.

Dianne Molin Gutscher, B.S. (Pratt Institute), Curator of Special Collections.

Kathleen Kenny, A.B. (Earlham), M.L.S. (Indiana), Science Librarian.

John Bright Ladley, B.S. (Pittsburgh), M.L.S. (Carnegie Institute of Technology), Public Services Librarian.

Priscilla Hubon McCarty, A.B. (Brown), M.L.S. (Maine), Catalog Librarian.

Judith Reid Montgomery, A.B. (Valparaiso), M.L.S. (Kent State), Assistant Librarian.

Leanne N. Pander, B.A. (Daemen), M.L.S. (Rhode Island), Reference Librarian.

Shirley A. Reuter, A.B. (New Hampshire), M.L.S. (Syracuse), Acquisitions Librarian.

Donna Glee Sciascia, A.B. (Emporia), M.A. in L.S. (Denver), Head, Catalog Department.

Anne Haas Shankland, A.B. (Ohio Wesleyan), M.L.S. (Florida State), Art Librarian.

Sydney Morgan Steinhart, B.S. (Lebanon Valley), M.L.S. (Pittsburgh), Reference/Catalog Librarian.

Elda Gallison Takagi, B.S., A.M. (Maine), A.M., M.A. in L.S. (Michigan), Documents Librarian.

Yuan Yao, B.A. (Xiamen), M.L.S. (Illinois), Catalog Librarian.

Lynda Kresge Zenzian, B.A., M.A. (Tufts), M.L.S. (Rhode Island), Catalog Librarian.

LANGUAGE MEDIA CENTER

Carmen M. Greenlee, Supervisor.

MULTICULTURAL AFFAIRS

Gayle Renee Pemberton, B.A. (Michigan), M.A., Ph.D. (Harvard), Director.
(On leave of absence.)

Faith Alyson Perry, A.B. (Bowdoin), M.A. (Yale), Acting Director of Multicultural Affairs.

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.

Robert Thomas Santry, B.A. (Southern Maine), Bookstore Manager.

MUSEUM OF ART

Katharine Johnson Watson, A.B. (Duke), A.M., Ph.D. (Pennsylvania), Director.

Suzanne K. Bergeron, B.A. (Mount Holyoke), Administrative Assistant.

Helen S. Dube, B.S. (Syracuse), Coordinator of Education Programs.

Donald A. Rosenthal, B.A. (Yale), M.A. (CUNY-Hunter), M.Phil., Ph.D. (Columbia), Associate Director and Curator of Collections in the Museum of Art.

Henrietta McBee Tye, B.S. (Simmons), M.Ed. (Wheelock), A.M. (Syracuse), Ph.D. (North Carolina, Chapel Hill), Registrar.

MUSIC

Barbara Lillian Whitepine, A.B. (Colby), Administrative Assistant.

PAYROLL SERVICES

Charles R. Trudeau, B.A. (Massachusetts-Amherst), Director of Payroll Services.

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.

PERSONNEL OFFICE

Caroline B. Garcia, B.S., M.Ed. (Kent State), Ph.D. (Boston College), Director of Personnel.

Mary E. Demers, A.B. (Bowdoin), Benefits Coordinator.

PHYSICAL PLANT

David Newton Barbour, B.S. (Maine), M.B.A. (Southern Maine), Director.

John Stanley DeWitt, Superintendent of Mechanical Services.

Patti Jean Hinkley, A.S., B.S. (Maine), Project Engineer.

George E. Libby, Superintendent of Buildings and Grounds.

Leo Paquin, Superintendent of Custodial Services.

Richard C. Parkhurst, B.A. (St. Francis), Administrative Assistant to the Director.

George Paton, B.S. (Massachusetts-Amherst), Assistant to the Director.

Philip A. Sargent, B.S. (Maine), M.F. (Yale), College Forester.

Howard Ewing Whalin, Superintendent of Brunswick Apartments.

PLANNED GIVING

Josiah H. Drummond, Jr., A.B. (Colby), M.Ed. (Maine), Director of Planned Giving.

PUBLIC RELATIONS AND PUBLICATIONS

Richard Alan Mersereau, A.B. (Bowdoin), M.A.T. (Wesleyan), Director.

Tatiana Bernard, B.A., M.A., M.S. (Michigan), Assistant Director.

Scott Whitney Hood, B.A. (Lake Forest), M.A. (Southern Maine), News Director.

Lucie Giegengack Teegarden, A.B. (College of New Rochelle), A.M. (Yale), Associate Director.

Michael Terry Townsend, A.B. (Bowdoin), Public Relations/Sports Information Intern.

REGISTRAR

Sarah Jane Bernard, B.S. (Bates), C.M.A. (Laban Institute of Movement Studies), Registrar.

SAFETY AND SECURITY

Michael S. Pander, B.S. (Charter Oak College), Director of Security.

SERVICE BUREAU

Barbara MacPhee Wyman, Supervisor of the Service Bureau.

STUDENT AID OFFICE

Walter Henry Moulton, A.B. (Bowdoin), Director.

Johanna Odette Infantine, A.B. (Mount Holyoke), Assistant Director.

TREASURER'S OFFICE

Betty Mathieson Massé, Assistant to the Treasurer.

Frederick J. Quivey, A.B. (Maine), M.B.A. (New Hampshire), Director of Budgets.

UPWARD BOUND

Doris Charrier Vladimiroff, A.B. (Duke), A.M. (Middlebury), Project Director.

Thomas J. Putnam, A.B. (Bowdoin), M.P.A. (Princeton), Assistant Director.

Kenneth E. Hopple, A.B. (Dennison), Administrative Assistant.

WOMEN'S RESOURCE CENTER

Marya Hunsinger, A.B. (Colorado College), A.M. (Wisconsin), Program Coordinator.

GENERAL COLLEGE COMMITTEES

Advisory Committee on Benefits: Alfred H. Fuchs, *Chair*; Donna M. Conrad, Caroline B. Garcia, C. Michael Jones, Pamalee J. Labbe, Susan R. Moore, Richard H. Stevens.

Bias Incident Committee: David N. Barbour, Joanne Feit Diehl, Robert H. Edwards, Jane L. Jervis, Kurt D. Keller '90, Kenneth A. Lewallen, Richard A. Mersereau, Jeffrey K. Nagle, Michael S. Pander, Director of Counseling, Director of Multicultural Affairs. Two students to be appointed as alternates.

Board on Sexual Harassment and Assault: R. Wells Johnson, *Chair*; Richard A. Mersereau, Ruth B. Peck, Thomas R. Johansson '91, Kristin R. Wright '91. One faculty member to be appointed. *Alternates:* Elizabeth A. Stemmler (1991), Anne W. Springer (1991), Sammie T. Robinson (1991). One faculty member to be appointed. Two students to be appointed. Anne Underwood, *Coordinator*.

Bowdoin Administrative Staff Steering Committee: Mary Lou Kennedy, *Chair*; Ana M. Brown, Katharine B. Bunge, Marya Hunsinger, Martin F. Szydowski, Charles Trudeau, Barbara Wyman, and Janet B. Smith, Assistant to the President, *ex officio*.

Bowdoin Bicentennial Committee: The Steering Committee: Merton G. Henry, *Chair*; Rosalyne S. Bernstein, Herbert S. French, Jr., Gordon F. Grimes, Barbara J. Kaster, Cynthia G. McFadden, Richard A. Mersereau, David Sherman, Sanford R. Sistare, Donald B. Snyder, Jr., William B. Whiteside.

Committee for Operations Review: Thomas J. Hochstetler, *Chair*; David N. Barbour, Caroline B. Garcia, Patti J. Hinckley, Jane L. Jervis, Mary Lou Kennedy, Judith R. Montgomery, William A. Torrey, Anne Underwood.

Environmental Impact Committee: Guy T. Emery, *Chair*; Patti J. Hinckley, C. Michael Jones, Edward P. Laine, Lawrence H. Simon, Roy E. Weymouth, Cara E. Maggioni '91, Cheryl B. Schultz '91, Rebekah J. Smith '93, John R. Wright '93, Marshall W. Carter '91 (*Alternate*).

Wellness Coalition Coordinating Committee: Ana M. Brown, *Chair*; Susan E. Bell, Richard A. Mersereau, Peter Slovenski, Roy E. Weymouth, Director of Counseling Service. Students to be appointed.

Campus and Buildings

BOWDOIN is located in Brunswick, Maine, a town of approximately 21,500 population, first settled in 1628, on the banks of the Androscoggin River, a few miles from the shores of Casco Bay. The campus, originally a sandy plain covered with blueberries and pines, is a tract of 110 acres containing more than fifty buildings and several playing fields.

Massachusetts Hall is the oldest building on the campus, having been completed in 1802. For several years it housed the students, and all classes were held there. Now used for faculty offices, the building was designated a Registered Historical Landmark in 1971. The entire campus became part of the Federal Street Historic District in 1976.

The work of the College has its heart and center in Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, which contains the accumulations of over a century and a half. The nucleus of its 760,000 volumes is the collection of books and pamphlets bequeathed by James Bowdoin. These "Bowdoin Books," rich in French literature, American history, and mineralogy, were supplemented by the same generous benefactor's gift of an art collection containing many paintings of old and modern masters. Among the paintings are the portraits of Thomas Jefferson and James Madison by Gilbert Stuart, and a notable collection of portraits by the distinguished colonial artist Robert Feke.

Classes are held in Adams, Banister, Cleaveland, Gibson, Hubbard, and Sills halls, the Russwurm Afro-American Center, Coles Tower, Searles Science Building, Smith Auditorium, and the Visual Arts Center. When students are not engaged in academic work, they have at their disposal many well-equipped recreational facilities. These include the Dayton Arena, Farley Field House, Morrell Gymnasium, Moulton Union, Pickard Field House, Sargent Gymnasium, and 35 acres of playing fields. Another valuable adjunct for the health of the student is the Dudley Coe Health Center.

COLLEGE BUILDINGS

Seth Adams Hall, designed by Francis H. Fassett, was erected in 1860-61 and named in honor of Seth Adams, a sugar refiner from Boston, who contributed liberally toward its construction. From 1862 until 1921 it housed the classrooms of the Medical School of Maine. It now houses the Smyth Mathematical Library, named in memory of William Smyth, of the Class of 1825, who was professor of mathematics from 1828 to 1868. The building also contains classrooms, lecture rooms, and the offices of the Department of Mathematics and the Department of Computer Science. It stands west of the President's Gateway.

Appleton Hall (1843), designed and built by Samuel Melcher and Sons and named in memory of the second president of the College; **Coleman Hall** (1958),

designed by McKim, Mead & White and named in honor of the family of the donor, Jane Coleman Pickard (Mrs. Frederick W. Pickard); **Hyde Hall** (1917), designed by Allen and Collens and named in memory of the seventh president of the College; **Maine Hall** (1808), designed and built by Anthony C. Raymond, known originally as "the College" and named later to commemorate the admission of Maine to the Union; **Moore Hall** (1941), designed by McKim, Mead & White and named in honor of his father by the donor, Hoyt Augustus Moore, LL.D., of the Class of 1895; and **Winthrop Hall** (1822), designed and built by Samuel Melcher III and named in memory of Governor John Winthrop of the Massachusetts Bay Colony, are the six campus residence halls. In 1964-66 the interiors of Appleton, Maine, and Winthrop were completely renovated.

Ashby House, located on Maine Street across from Hawthorne-Longfellow Library, was the home of the Reverend Thompson E. Ashby h '30, for many years minister of the First Parish Church, and Mrs. Ashby. It has been used over the years as a faculty residence, eating hall, and student dormitory. It was renovated in 1974 and currently houses the Department of Sociology and Anthropology.

Baxter House, at 10 College Street, was purchased in 1971 and is used as a student residence. For nearly twenty years it was the chapter house of Delta Psi of Sigma Nu, which established a scholarship fund at the College with the proceeds from the sale. Named for the Baxter family in recognition of its many contributions to Bowdoin and the state of Maine, it was designed by Chapman and Frazer and built by Hartley C. Baxter, of the Class of 1878, one of five Baxters to serve on the Governing Boards and stepbrother of Percival P. Baxter, of the Class of 1898, governor of Maine from 1921 to 1925.

Brunswick Apartments, on Maine Street, acquired in 1973, provide housing for 100 juniors and seniors and townspeople in one- and two-bedroom apartments.

Burnett House, 232 Maine Street, was built in 1858 for Mr. Henry Martin, a grocer and later president of the Pejepscot Bank. In 1919 it was purchased by Charles T. and Sue Winchell Burnett. Professor Burnett was chairman of the Department of Psychology and a member of the faculty for forty-two years until his retirement in 1944; Mrs. Burnett, a cellist, took part in many musical productions on campus. From 1965 to 1970 Burnett House was home to the Phi Delta Psi fraternity. The College acquired it in 1972, and it is now a residence for students. There is a printmaking studio for the Department of Art in the ell.

Chamberlain Hall, designed by Hugh Stubbins and constructed in 1964, was named in memory of General Joshua Lawrence Chamberlain, LL.D., of the Class of 1852, Civil War hero, governor of Maine, and president of Bowdoin from 1871 to 1883. It houses the Admissions Office.

The Chapel, a Romanesque church of undressed granite designed by Richard Upjohn, was built during the decade from 1845 to 1855 from funds solicited

from private donors and received from the Bowdoin estate. The façade is distinguished by twin towers and spires that rise to a height of 120 feet. The interior resembles the plan of English college chapels, with a broad central aisle from either side of which rise the ranges of seats. The lofty walls are decorated with twelve large paintings. The Chapel stands as a monument to President Leonard Woods, fourth president of the College, under whose personal direction it was erected. The flags are of the original thirteen colonies plus Maine, which was a part of Massachusetts at the time of the founding of the College in 1794. A set of eleven chimes, the gift of William Martin Payson, of the Class of 1874, was installed in the southwest tower in 1923. In the Chapel is an organ given in 1927 by Cyrus H. K. Curtis, LL.D.

That portion of the building that formerly housed the reading rooms and stack space of the College library was named **Banister Hall** in 1850 in recognition of the gifts of Mrs. Sarah Hale, the daughter of the Honorable William Banister. It contains the offices, classrooms, and laboratories of the Department of Psychology. The human psychobiology laboratory is named in honor of psychologist Harry Helson, Ph.D., of the Class of 1921.

Chase Barn Chamber, named in memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature from 1925 to 1951, and his wife, Helen Johnson Chase, is a handsome room located in the ell of the **Johnson House**. Designed by Felix Arnold Burton, of the Class of 1907, in the Elizabethan style, the chamber is heavily timbered, contains a small stage and an impressive fireplace, and houses many of the books from the Chase library. It is used for small classes, seminars, and conferences.

Parker Cleaveland Hall, designed by McKim, Mead & White, was dedicated in 1952. The building was made possible by donors to the Sesquicentennial Fund. It houses the Department of Chemistry and bears the name of Parker Cleaveland, who taught chemistry and mineralogy at Bowdoin from 1805 to 1858 and was a pioneer in geological studies. Special gifts provided the Kresge Laboratory of Physical Chemistry, the Wentworth Laboratory of Analytical Chemistry, the 1927 Room (a private laboratory), the Adams Lecture Room, the Burnett Room (a seminar room), and the Dana Laboratory of Organic Chemistry.

10 Cleaveland Street is a residence for students.

12 Cleaveland Street houses the offices of the *Bowdoin Orient*.

Dudley Coe Health Center is a three-story brick building erected in 1916-17. It was designed by Allen and Collens and given by Thomas Upham Coe, M.D., of the Class of 1857, in memory of his son, and stands in the pines to the south of the Hyde Athletic Building. In 1957, it was enlarged through a gift by Agnes M. Shumway h '62 (Mrs. Sherman N. Shumway). In 1962 it was licensed by the state as a private general hospital. An addition was built in 1974 to provide more space for patient care. The second floor houses the offices of the Gyneco-

logical Services; the third floor, the Counseling Service. The Service Bureau is located in the basement.

Coles Tower, designed by Hugh Stubbins, was completed in 1964 and served for several years as the residential unit of the Senior Center. After the Senior-Year Program was ended in 1979, the sixteen-story tower was named in honor of James Stacy Coles, Ph.D., D.Sc., LL.D., Sc.D., ninth president of the College and the program's chief proponent. The building includes living and study quarters, seminar and conference rooms, lounges, and accommodations for official guests of the College. The first floor is dedicated to the memory and honor of the late Henry Quinby Hawes, A.M., of the Class of 1910, and Mrs. Hawes.

30 College Street, acquired by the College in 1977, is the headquarters of E.A.R.T.H. and a residence for approximately eight students and teaching fellows.

38 College Street houses faculty offices for the Asian Studies Program and the Department of Religion.

Copeland House, at 88 Federal Street, was acquired in 1972. A residence for students, it was formerly the home of Manton Copeland, Ph.D., who taught biology at the College from 1908 until 1947 and was Josiah Little Professor of Natural Science Emeritus at the time of his death in 1971.

Marshall Perley Cram Alumni House, at 83 Federal Street, was bequeathed to the College in 1933 on the death of Professor Marshall Perley Cram, Ph.D., of the Class of 1904. Renovated in 1962 and maintained by the College, it is the center of alumni activities at Bowdoin and contains lounges, rest rooms, and other facilities for the use of visiting alumni and their families and guests. It also houses the alumni relations office and the offices of the *Bowdoin Magazine*. The Kate Douglas Wiggin Room, located on the first floor, was presented by the Society of Bowdoin Women in 1986. Displayed on the first floor is a collection of polar bears done in crystal, porcelain, and other media that was the gift of the widow of Daniel L. Dayton, Jr., '49 in 1974.

Curtis Pool Building, a separate wing attached to the Sargent Gymnasium, was given to the College in 1927 by Cyrus H. K. Curtis, LL.D. Designed by McKim, Mead & White, the building now houses the Environmental Studies Center. The pool was closed in October 1987 on the opening of the new pool in the Pickard Field complex.

Dayton Arena, designed by Barr, Gleason, and Barr and named in memory of Daniel L. Dayton, Jr., of the Class of 1949, was built in 1956 with contributions from alumni, students, and friends. It contains seats for 2,400 spectators, a regulation ice-hockey rink with a refrigerated surface 200 feet long by 85 feet wide, locker rooms, and a snack bar. During 1972 and 1973 numerous improvements were made, including the installation of brighter lights and additional ice-making equipment, which enables the arena to be operated year-

round. It is the site of intercollegiate and intramural hockey contests as well as recreational skating.

William Farley Field House and new sixteen-lane pool, designed by Sasaki Associates, are attached to the rear of the Pickard Field House. The Farley Field House was opened in the fall of 1987 and was constructed with support from William Farley '64. It contains a 200-meter, six-lane track, with four tennis courts on a flexible infield area, a free weight room, and space for equipment storage.

85 Federal Street, the former home of Bowdoin's presidents, was built in 1860 by Captain Francis C. Jordan and originally stood on the lot at 77 Federal Street. It was purchased by the College in 1867 and was occupied by President Harris until 1871. The house was then purchased by Peleg W. A. Chandler, who had it moved in 1874 to its present location at the corner of Federal and Bath streets. Shortly after President Hyde assumed office in 1885, it became his official residence. In 1890 the College reacquired the house. The ballroom, designed by Felix Arnold Burton, was added in 1926. The building was converted to house the development and alumni fund offices in 1982 after President Greason was inaugurated.

Getchell House, located at 5 Bath Street, is diagonally opposite Adams Hall. It was given in 1955 by Miss Gertrude Bowdoin Getchell, who had provided lodgings for students in the house, and it was completely refurbished in 1956. It houses the public relations and publications offices.

The Harvey Dow Gibson Hall of Music, named for Harvey Dow Gibson, LL.D., of the Class of 1902, was dedicated in 1954. Its construction was made possible by funds donated by Mrs. Harvey Dow Gibson; by Mrs. Gibson's daughter, Mrs. Whitney Bourne Choate; by the Manufacturers Trust Company of New York; and by several friends of Mr. Gibson. Designed by McKim, Mead & White, the building contains class, rehearsal, and practice rooms, a recording room, several rooms for listening to records, offices, and a music library. A recital hall was completed in 1978. The common room is richly paneled in carved walnut from the music salon designed in 1724 by Jean Lassurance (1695-1755) for the Hôtel de Sens in Paris, the gift of Miss Susan Dwight Bliss.

Ham House, at 3 Bath Street, was built in 1846 and has been a residence for generations of Bowdoin professors, most recently for Professor and Mrs. Roscoe J. Ham, who lived in it from 1909 until their deaths in 1953. The house was bequeathed to the College by Professor Ham, George Taylor Files Professor of Modern Languages, who taught at Bowdoin from 1901 to 1945. It now houses Bowdoin Upward Bound.

Harpwell Street Apartments, adjacent to Pickard Field, and **Pine Street Apartments**, across from Whittier Field, were designed by Design Five Maine, Inc., and opened in the fall of 1973. There are two buildings of contemporary design at each location, and each of the buildings contains six apartments. The apartments, which accommodate up to ninety-six students, were built to meet the

need for additional housing and to provide an alternative to living in a conventional dormitory.

Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, designed by Steinman, Cain and White of New York, was built in 1964-65 from funds contributed during the Capital Campaign. It was named after two of Bowdoin's literary giants, both members of the Class of 1825. It houses the principal portions of the library of the College and—in its western end, named **Hawthorne-Longfellow Hall**—most of the general administrative offices of the College. In 1984, the Hubbard Hall-library connector, designed by Shepley Bullfinch Richardson and Abbott, was completed. The area containing the government documents is named in memory of John C. Donovan, the DeAlva Stanwood Alexander Professor of Government and member of the faculty from 1965 to 1984. Renovations to Hubbard's book stack area, additional open-shelf space, and increased study areas were also finished. Also included in the project was climate control for a remodeled and enlarged Special Collections Suite.

The new **Hatch Science Library**, now under construction, is expected to open for the 1991 spring term. The building, with 14,000 square feet of space on three levels, will house 70,000 volumes, 120 study stations, six faculty studies, and office and work areas for staff. It will hold all of the College's science-related materials.

Hubbard Grandstand was given in 1904 by General Thomas H. Hubbard, LL.D., of the Class of 1857, and designed by Henry Vaughan. It is situated on **Whittier Field**, a tract of 5 acres, named in honor of Frank Nathaniel Whittier, M.D., of the Class of 1885, for many years director of the gymnasium, who was largely instrumental in its acquisition for varsity football and track in 1896. An electrically operated scoreboard, the gift of the widows of Harvey Dow Gibson, LL.D., of the Class of 1902, and Adriel Ulmer Bird, A.M., of the Class of 1916, was erected in 1960. Surrounding the field is the **John Joseph Magee Track**, an Olympic-regulation, all-weather track given by alumni and friends in memory of Mr. Magee, coach, trainer, and director of track and field athletics from 1913 to 1955.

Hubbard Hall, designed by Henry Vaughan and erected in 1902-3, was the gift of General Hubbard and his wife, Sibyl Fahnstock Hubbard. For over sixty years, until the fall of 1965, it was the College library. It is now used for faculty offices, examination rooms, and the Departments of Geology, History, Economics, and Government and Legal Studies. The Computing Center is located in the basement. The Peary-MacMillan Arctic Museum and Arctic Studies Center are also located in the building, with museum facilities on the first floor, and the Susan Dwight Bliss Room for rare books and bindings remains on the second floor. During the spring of 1977 the large west wing of the second floor was restored to its original condition and now provides additional study area for students.

Johnson House, designed by Gervase Wheeler and named in memory of Henry Johnson, Ph.D., Litt.D., of the Class of 1874, a distinguished member of

the Bowdoin faculty from 1877 to 1918, and Mrs. Johnson, is located at the corner of Maine and Boody streets across from the southwestern entrance to the campus. Bequeathed to the College in 1957, the house was designated a Registered Historical Landmark in 1975. It has served as the home of deans of the College and President Greason.

Little-Mitchell House, at 6-8 College Street, was designed and built by Samuel Melcher III and houses the John Brown Russwurm Afro-American Center. The Mitchell House is named in honor of Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, Edward Little Professor of Rhetoric and Oratory from 1893 to 1939. It was given by Professor Mitchell in 1961. The Little House, the 8 College Street side of the connected buildings, was acquired in 1962.

Little-Mitchell House was opened as the Afro-American Center in 1970 and rededicated as the John Brown Russwurm Afro-American Center in 1979 in honor of John Brown Russwurm, of the Class of 1826, Bowdoin's first black graduate, publisher, and governor of the colony of Maryland in Liberia at the time of his death in 1851. The center houses the offices of the Afro-American Studies Program; the Herman S. Dreer Reading Room, named in honor of a black graduate of the Class of 1910; and a 1,600-volume library of African and Afro-American source materials.

238 Maine Street was built about 1900 for George Taylor and Edith Davis Files. Professor Files, of the Class of 1889, was professor of German at Bowdoin for thirty years before his death in 1919. The house belonged to the Sigma Nu fraternity from 1921 to 1951, when it was sold to Alpha Rho Upsilon (All Races United), an interracial fraternity formed by students who were barred from the existing fraternities. In 1988, the College acquired the house, though it continued to be the headquarters of Alpha Rho Upsilon. In 1990, the building became a college residence hall.

Massachusetts Hall, planned in 1798 and completed in 1802 by Aaron and Samuel Melcher III, who designed the building as well, was the first College building erected. In 1936 it was remodeled, and five years later, through a gift of Frank Herbert Swan, LL.D., of the Class of 1898, the third floor was restored and furnished to accommodate faculty meetings. Until 1965 the building housed some of the administrative offices. It now houses the Departments of English and Philosophy.

Mayflower Apartments, at 14 Belmont Street, acquired in 1973, provides housing for thirty-five juniors and seniors in one- and two-bedroom apartments. The building is situated in a residential neighborhood two blocks from the campus.

Memorial Hall, designed by Samuel D. Backus and William G. Preston and finished in 1882, is a structure of local granite in the Gothic style. It is a memorial to the alumni and students of the College who served in the Civil War and whose names and ranks are inscribed on bronze plaques in the lobby. The lower floor

contains classrooms and an experimental theater, which is named in memory of George H. Quinby, of the Class of 1923, who was director of dramatics and taught English from 1934 to 1969. The entire interior was redesigned by McKim, Mead & White and rebuilt in 1954-55 to house the Pickard Theater, one of the gifts of Frederick William Pickard, LL.D., of the Class of 1894. On the lower level is a plaque memorializing William H. Moody, of the Class of 1956, theater technician from 1958 until his death in 1976.

Malcolm E. Morrell Gymnasium, connected to Sargent Gymnasium, is a 50,000-square-foot building designed by Hugh Stubbins and Associates. Built in 1964-65 from funds contributed during the Capital Campaign, it was named in 1969 in memory of Malcolm Elmer Morrell, of the Class of 1924, Bowdoin's director of athletics from 1928 to 1967. The gymnasium contains a modern basketball court with seats for about 2,500 persons, four visiting team rooms, eleven squash courts, offices for the director of athletics and his staff, and other rooms for physical education purposes.

The Moulton Union, designed by McKim, Mead & White, was built in 1927-28. It was given and partially endowed by Augustus Freedom Moulton, LL.D., of the Class of 1873, as a social, recreational, and service center for the College. In 1964-65, a two-story extension was added on the south and east sides of the building. The spacious main lounge and several smaller intimate lounges and student activity areas are provided for general social purposes. The Union also contains the college reception and information center, the Events Office, the office of WBOR, the Career Services Office, the campus telephone switchboard, a bookstore, dining facilities, and a game room. The Union stands just outside the quadrangle opposite Appleton, Hyde, and Moore halls.

The Observatory was designed by Samuel B. Dunning and erected near the present Curtis Pool in 1890-91 with funds given by John Taylor, Esq., of Fairbury, Illinois. It was moved to the southeast corner of Pickard Field in the summer of 1930 and is reached from the Harpswell Road. In 1965 it was renovated and a new telescope was installed.

Pickard Field House stands at the entrance of Pickard Field. It was given in 1937 by Frederick William Pickard, LL.D., of the Class of 1894, and Mrs. Pickard. The building, designed by John Calvin Stevens, contains lockers and showers for men and women. **Pickard Field**, a tract of 66 acres, was presented to the College by Mr. Pickard in 1926. In 1952, 9 acres were added to the field by purchase, making a total area of 75 acres, 35 of which are fully developed playing fields. The field contains the varsity and first-year-student baseball and softball diamonds, several spacious playing fields for football, soccer, and lacrosse, and eight clay tennis courts.

Pickard Theater in Memorial Hall, also a gift of Mr. Pickard, was designed by McKim, Mead & White and dedicated in 1955. It has a seating capacity of

slightly more than 600 and a stage 55 feet wide and 30 feet deep. The space from the stage floor to the gridiron is 48 feet. Adorning the walls of the auditorium are rubbings of six large reliefs of the Chinese emperor T'ai Tsung's war-horses. The reliefs were executed in about A.D. 637 for the emperor's tomb and were possibly from designs of Yen Li-pen. The rubbings were the gift of Walter H. Mallery in 1955.

Rhodes Hall, formerly the Bath Street Primary School, was purchased from the town of Brunswick in 1946 to provide additional facilities for instruction and administration. The building was named to commemorate the fact that three pupils of the school later achieved distinction as Rhodes scholars at Oxford University. Rhodes Hall houses the offices of the Departments of Physical Plant and Campus Security.

Sargent Gymnasium and General Thomas Worcester Hyde Athletic Building, designed by Allen and Collens, were erected in 1912. The gymnasium was built from contributions from many of the students and alumni, and named in honor of Dudley A. Sargent, M.D., Sc.D., of the Class of 1875; the athletic building was given by John Hyde, Esq., of Bath, in memory of his father, Thomas Worcester Hyde, A.M., of the Class of 1861. In 1965-66 Sargent Gymnasium was altered and renovated to make it part of the comprehensive plan for the indoor athletic facilities of the College.

Mary Frances Searles Science Building, designed by Henry Vaughan, was built in 1894 and renovated in 1952. It was the gift of Edward F. Searles in memory of his wife. With the Walker Art Building, Gibson Hall, and the Visual Arts Center, it forms the western side of the quadrangle. The building contains lecture rooms, laboratories, and libraries of the Departments of Biology and Physics. A battery of solid-state electronic equipment was installed in the Department of Physics in 1974. It was purchased with funds provided by the bequest of Constance H. Hall. She was the daughter of Edwin H. Hall of the Class of 1875, best known for his discovery of the Hall effect, which has become a key principle in the design of solid-state electronic components.

Sills Hall and Smith Auditorium, designed by McKim, Mead & White, were completed in the autumn of 1950. The main structure was made possible by the first appropriations from the Sesquicentennial Fund and was named after the eighth president of the College, Kenneth Charles Morton Sills (1879-1954), of the Class of 1901; the wing, containing an auditorium seating 210 persons, was built by appropriation of the Francis, George, David, and Benjamin Smith Fund, bequeathed by Dudley E. Wolfe, of Rockland. The Language Media Center, donated by the Pew Memorial Trust, and the electronic film production laboratory and speech center are located in the wing. In 1968 a donor who wished to remain anonymous established the Constance and Albert Thayer Speech Center Fund to maintain the speech center. The fund was named in honor of the late Albert R. Thayer, A.M., of the Class of 1922, Harrison King McCann Professor of Oral Communication, and Mrs. Thayer.

Winfield Smith House, at 59 Harpswell Street, was acquired in 1972. A residence for students, it is named in memory of L. Winfield Smith, of the Class of 1907, who was born and raised in the house, "in recognition of the Smith family's long and devoted interest in Bowdoin."

The Visual Arts Center, designed by Edward Larrabee Barnes and completed in 1975, was constructed with funds given through the 175th Anniversary Campaign. Connected to the Walker Art Building by underground storage and exhibition rooms, the center contains some 23,000 square feet of instructional space. A 300-seat auditorium was dedicated in recognition of a generous grant from the Kresge Foundation. One of the classrooms has been dedicated in honor of Philip C. Beam, Ph.D., Henry Johnson Professor of Art and Archaeology Emeritus and a member of the faculty for more than forty years. The photography area is dedicated to the memory of Alan H. Wiley.

Walker Art Building, designed by McKim, Mead & White, was erected in 1892-94 and extensively renovated in 1975-76. It was given by the Misses Harriet and Sophia Walker, of Waltham, Massachusetts, as a memorial to their uncle, Theophilus Wheeler Walker, of Boston, a cousin of President Woods. The building houses the collections and offices of the Bowdoin College Museum of Art. A bronze bulletin board in memory of Henry Edwin Andrews, A.M., of the Class of 1894, director of the museum from 1920 to 1939, is located in the rotunda. The building is surrounded on three sides by a paved terrace with supporting walls and parapets of granite. Granite and bronze sculptures adorn the front wall. Following the renovation of the building, one of the galleries on the lower level was dedicated to the memory of John A. and Helen P. Becker. The central gallery on the lower level was dedicated to the memory of John H. Halford, Class of 1907, Overseer and Trustee of the College for twenty years.

Wentworth Hall was named in memory of Walter V. Wentworth, Sc.D., of the Class of 1886, an Overseer of the College from 1929 to 1958. Constructed in 1964 and designed by Hugh Stubbins, it is a two-story building adjacent to Coles Tower and contains a dining room, main lounge, and other rooms for instructional, social, and cultural activities. In 1974 the main lounge was dedicated to the memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925, acting president from 1967 to 1969 and for many years William Nelson Cromwell Professor of Constitutional and International Law and Government.

The Women's Resource Center, at 24 College Street, houses a library and the offices of the Women's Studies Program and the Bowdoin Women's Association, and provides student housing.

OTHER MEMORIALS

The Albert Abrahamson '26 Reading Room, on the top floor of the newly renovated stack area of Hubbard Hall, is dedicated to the memory of Albert Abrahamson '26, George Lincoln Skolfield, Jr., Professor of Economics, member of the faculty for twenty-five years and generous benefactor of the library renovation project.

The Harold Lee Berry Special Collections Suite, in Hawthorne-Longfellow Library, is named in memory of Harold Lee Berry, A.M., of the Class of 1901, for nearly forty years a member of the Governing Boards and generous benefactor of the College. The suite comprises several rooms in the northeast area of the third floor.

The Bowdoin Polar Bear, placed in 1937, is a memorial to members of the Class of 1912. The base and life-size statue were carved by Frederick George Richard Roth. The figure stands in front of the entrance to the Sargent Gymnasium.

The Stuart Franklin Brown Lobby, in Hawthorne-Longfellow Library, is a memorial to Stuart Franklin Brown, of the Class of 1910, and was the gift of Mrs. Brown.

The Bright-Herbert Memorial Stone, a gift of the Class of 1979 and Theta Delta Chi, was placed among the pines near Whittier Field in memory of Nicholas Bright '79 and Pamela Herbert '90, victims of the crash of Pan American Flight 103 in December 1988.

The Calder Mobile *Red Fossils* was purchased with funds given by family and friends in memory of Charles B. Price III, of the Class of 1974, who died in 1972. Purchased because Price was an admirer of the work of Alexander Calder, the mobile hangs in the Hawthorne-Longfellow Library. Price, a biology and economics major, was a Dean's List student and James Bowdoin Scholar.

Catlin Path, extending from the Warren Eastman Robinson Gateway to Hubbard Hall, was laid in 1954 through the generous gift of Warren Benjamin Catlin, Ph.D., for many years Fayerweather Professor of Economics and Sociology.

The Chapman Lobby, in the Farley Field House, the gift of H. Phillip Chapman, Jr., is dedicated in honor of his father, Henry P. Chapman of the Class of 1906.

The Chase Memorial Lamps, dedicated to the memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature (1925-51), stand on the Moulton Union terrace. They were presented to the College by Mrs. Chase in 1954.

The Class of 1875 Gateway was designed by McKim, Mead & White and erected in 1901 as a memorial to members of the class. It forms the Maine Street entrance of the Class of 1895 Path.

The Class of 1878 Gateway, designed by Kilham and Hopkins and erected in 1903, is a memorial to members of the class. It is on Bath Street between Memorial Hall and the First Parish Church.

The Class of 1886 Pathways are a network of walks laid in 1945 as a memorial to members of his class through the generosity of Walter V. Wentworth, Sc.D., of the Class of 1886. The pathways traverse an area lying north of Massachusetts Hall.

The Class of 1895 Path was laid in 1945 as a memorial to members of the class. It extends from the Chapel to the Class of 1875 Gateway.

The Class of 1898 Bulletin Board, erected in 1924, is a memorial to members of the class. It is double-faced, illuminated, and made of bronze.

The Class of 1903 Gateway, erected in 1928, is a memorial to members of the class. It forms the main entrance to the Whittier Athletic Field.

The Class of 1909 Organ, an electronic instrument for use in the Pickard Theater, was presented by the Class of 1909 on the occasion of its fiftieth anniversary and dedicated in June 1960. A fund given at the same time is for the maintenance of the organ and for the support of musical education in the College.

The Class of 1910 Path was laid in 1940 as a memorial to members of the class. It extends from Bath Street to Coleman Hall, running parallel to the four dormitories and in front of the entrance to the Chapel.

The Class of 1914 Librarian's Office, in the Hawthorne-Longfellow Library, is in honor of the members of the Class of 1914, who made a specific gift for this purpose.

The Class of 1916 Path was laid in 1946 as a memorial to members of the class. It extends from Massachusetts Hall to the Alpheus Spring Packard Gateway.

The Class of 1919 Path, laid in 1945, is a memorial to members of the class. It extends from the north entrance of Winthrop Hall, past the entrances to Massachusetts Hall and Memorial Hall, to the Franklin Clement Robinson Gateway.

The Class of 1922 Fountain, between Hawthorne-Longfellow Library and Hubbard Hall, was constructed in 1968. It is the gift of Mrs. John C. Pickard of Wilmington, Delaware, in honor of her husband's class. The fountain was designed by André R. Warren and was constructed by workmen of the Department of Physical Plant.

The Class of 1924 Radio Station (WBOR, "Bowdoin-on-Radio") was given by the Class of 1924 on the occasion of its twenty-fifth reunion. The station, installed in 1951 on the second floor of the Moulton Union, contains two broadcasting studios and a fully equipped control room.

The Class of 1929 Electronic Chimes System, for automation of the Chapel chimes, was presented by the Class of 1929 on the occasion of its fortieth reunion. A fund for maintenance of the system was established at the same time.

The Class of 1937 Lounge, in the Cram Alumni House, was presented by the Class of 1937 on the occasion of its twenty-fifth reunion. It is a large, informal, and rustic room, with pine furniture, old pictures of Bowdoin and Brunswick, and a large hewn-granite fireplace. The lounge was given in memory of Harold L. Cross, Jr., David T. Deane, J. Donald Dyer, and Maxwell A. Eaton, who gave their lives in the service of their country during World War II.

The Class of 1938 Newspaper Room, in the Hawthorne-Longfellow Library, is in honor of the members of the class. The room is on the first floor to the right of the entrance.

The Class of 1942 Cross was placed behind the reading stand in the Chapel in 1952 in memory of class members who gave their lives during World War II.

The Class of 1961 Trophy Case, in the Farley Field House, is a gift in honor of Charles E. Prinn III, Class Agent, on the occasion of the twenty-fifth reunion of the class.

The Class of 1977 Lounge, in the Farley Field House, a tenth reunion gift, is dedicated to the memory of idyllic days beneath the Bowdoin Pines.

The Harry Howard Cloudman Drinking Fountain, erected in 1938, is in memory of Harry Howard Cloudman, M.D., of the Class of 1901, one of the outstanding athletes at the turn of the century. It stands near the Sargent Gymnasium.

The Robert Peter Tristram Coffin Reading Room, in the Hawthorne-Longfellow Library, is in memory of Robert Peter Tristram Coffin, Litt.D., of the Class of 1915, Pierce Professor of English from 1934 to 1955, a distinguished author, poet, and professor. The room was the gift of the Class of 1915 on the occasion of its fiftieth reunion and occupies the northern bay on the first floor.

The Colbath Room, in the Morrell Gymnasium, is a memorial to Henry Jewett Colbath, of the Class of 1910, an outstanding athlete, dedicated teacher, and coach.

The William John Curtis 1875 Room, in the Hawthorne-Longfellow Library, is a memorial to William John Curtis, LL.D., of the Class of 1875, for over twenty-five years an Overseer and Trustee of the College, and a generous benefactor, always in the name of his class. The room, in the northeast corner of the first floor, is used for current periodicals.

Daggett Lounge, the main lounge in Wentworth Hall, was dedicated in 1974 to the memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925. Professor Daggett, a member of the faculty for more than forty years and acting president from 1967 to 1969, was William Nelson Cromwell Professor of Constitutional and International Law and Government at the time of his death in 1973.

The Dane Flagpole, in honor of Francis Smith Dane, of the Class of 1896, stands in the northwest corner of Whittier Field. The gift of Mrs. Annie Lawrence E. Dane and a member of her family, the flagpole was placed in 1954 in recognition of Mr. Dane's efforts as an undergraduate to acquire an adequate playing field for the College.

The James Frederick Dudley Classroom in Banister Hall was renovated and furnished in 1954 as a memorial to James F. Dudley, A.M., of the Class of 1865, by the bequest of Nettie S. Dudley.

The William Pitt Fessenden Conference Room, in Hawthorne-Longfellow Hall, is a memorial to William Pitt Fessenden, LL.D., of the Class of 1823, United States senator 1854-64, 1865-69; United States secretary of the treasury 1864-65; and Overseer and Trustee of the College from 1843 to 1869. The room is on the second floor, near the offices of the president and deans.

The Melville Weston Fuller Reading Room, in Hawthorne-Longfellow Library, is a memorial to Melville Weston Fuller, LL.D., of the Class of 1853, chief justice of the United States Supreme Court from 1888 to 1910, and an Overseer and Trustee of the College from 1875 to 1910. The room occupies the southern bay on the first floor.

The Gardner Bench, near Hawthorne-Longfellow Library, is dedicated to the memory of William Alexander Gardner, of the Class of 1881, and was presented to the College by Mrs. Gardner in 1954.

The Polly Greason Room, in the Special Collections section of the Hawthorne-Longfellow Library, was named in 1990 in recognition of Polly Greason's service on behalf of the College.

The Greene Suite, an apartment on the sixteenth floor of Coles Tower, is a memorial to the Reverend Joseph K. Greene, of the Class of 1855, and to Professor Theodore M. Greene, L.H.D., and his wife, Elizabeth R. Greene. The Reverend Mr. Greene, father of Professor Greene, was a missionary to Turkey. Professor and Mrs. Greene lived in the suite from 1966 to 1969 while he was visiting professor of philosophy.

The Lawrence Sargent Hall Room, on the second floor of Massachusetts Hall, was named in 1986 to honor Professor Hall, of the Class of 1936, Henry Leland Chapman Professor of English Literature Emeritus. The room was Professor Hall's office for many years and continues to be the office of the Henry Leland Chapman Professor of English Literature.

Hutchinson Lounge and **Hutchinson Terrace**, in Wentworth Hall, are memorials to Charles Lyman Hutchinson, of the Class of 1890, a prominent lawyer in Portland. They are on the south side of the building between the main dining room and lounge.

The Elijah Kellogg Tree, a large pine dedicated to the memory of the Reverend Elijah Kellogg, A.M., of the Class of 1840, stands near the corner of Bath Street and Sills Drive.

The Fritz C. A. Koelln Room, in Sills Hall, was dedicated in 1971 in honor of Fritz C. A. Koelln, Ph.D., George Taylor Files Professor of Modern Languages and a member of the Department of German from 1929 until his retirement in 1971, "in recognition of his devoted service to the College and the inspiration he has been to so many undergraduates over the years."

The Donovan D. Lancaster Lounge, in the Moulton Union, was named in November 1970 in honor of Donovan D. Lancaster, of the Class of 1927, Director of the Moulton Union and the Centralized Dining Service Emeritus and a member of the College staff for over forty years. The lounge is used for lectures and exhibitions of art and photography throughout the year.

The George Thomas Little Bibliography and Card Catalogue Area in Hawthorne-Longfellow Library, is a memorial to George Thomas Little, Litt.D., of the Class of 1877, librarian of the College from 1885 to 1915. The area occupies the center portion of the first floor.

Little Ponds Wildlife Sanctuary is the gift of Mrs. Harold Trowbridge Pulsifer, in memory of her husband, and Sheldon Ware, a neighbor. Located at Bethel Point, East Harpswell, and the result of a series of gifts beginning in 1961, this tract of 15 acres includes a meadow, pond, woodland, and shore frontage. It is used for the study and conservation of wildlife and is the site of the Bowdoin College Marine Research Station.

The Eaton Leith Tree, a flowering crab apple, was planted on the south side of the Hawthorne-Longfellow Library in 1988 in appreciation of Professor Emeritus Eaton Leith, a member of the Department of Romance Languages from 1936 until his retirement in 1970.

The Harrison King McCann Music Lounge, on the sixteenth floor of the Coles Tower, is a memorial to Harrison King McCann, A.M., of the Class of 1902, for thirty years an Overseer of the College.

The Cecil Cleophus McLaughlin Study, in Chamberlain Hall, is a memorial to Cecil Cleophus McLaughlin, M.D., of the Class of 1923. The study was the gift of Mrs. McLaughlin.

The John Joseph Magee Track, surrounding Whittier Field, was given by a group of alumni and friends to honor the memory of John Joseph Magee, coach,

trainer, and director of track and field athletics from 1913 to 1955 and an Olympic team coach in 1920, 1924, 1928, and 1932. Constructed in 1970, the Olympic-regulation, all-weather track was dedicated in 1971.

The Magee Training Room, in the Morrell Gymnasium, is another memorial to Coach Magee.

The Memorial Flagpole, designed by McKim, Mead & White, was erected in 1930 with funds given by the alumni in memory of the twenty-nine Bowdoin men who lost their lives in World War I. The Honor Roll is engraved on the mammoth granite base surmounted by ornamental bronze. The flagpole stands in the southwestern corner of the campus between Hubbard Hall, Walker Art Building, and Gibson Hall.

The Wilmot Brookings Mitchell Lounge, on the second floor of Wentworth Hall, is a memorial to Wilmot Brookings Mitchell, Litt.D., L.H.D., of the Class of 1890, a beloved teacher of English for almost fifty years.

The Morrell Office, in the Malcolm E. Morrell Gymnasium, was given by members of the Class of 1924 in honor of their classmate Malcolm Elmer Morrell, director of athletics from 1928 to 1967. It is the office of the director of athletics.

The Dean Paul Nixon Lounge-Conference Room, in Hawthorne-Longfellow Library, is a memorial to Paul Nixon, L.H.D., LL.D., for over forty years a teacher of Latin and dean of the College from 1918 to 1947. The room is located in the southeast corner of the third floor.

The Alpheus Spring Packard Gateway, designed by Felix Arnold Burton and erected in 1940 on College Street, is a memorial to Alpheus Spring Packard, D.D., of the Class of 1816, a member of the Bowdoin faculty from 1819 to 1884.

The Peucinian Room, built in 1951, is in a corner of the lower floor of Sills Hall. It is paneled in timber taken from the Bowdoin Pines. The motto of the Peucinian Society, *Pinos loquentes semper habemus*, is carved on a heavy timber above the fireplace. The fireplace and paneling were the gift of the Bowdoin Fathers Association in memory of Suzanne Young (1922-48).

The Pickard Trees, twelve hawthorns in memory of Jane Coleman Pickard (Mrs. Frederick William Pickard), donor of Coleman Hall and co-donor of the Pickard Field House, were replanted around Coleman Hall by the Society of Bowdoin Women and dedicated in June 1959.

The Franklin Pierce Reading Room, in Hawthorne-Longfellow Library, is in memory of Franklin Pierce, LL.D., of the Class of 1824, the fourteenth president of the United States. This informal reading room is at the east end of the second floor.

The William Curtis Pierce Library, on the second floor of the Visual Arts Center, was dedicated in honor of William Curtis Pierce, LL.B., LL.D., of the

Class of 1928, in recognition of his service to the College as an Overseer, Trustee, and supporter of the arts.

The President's Gateway, erected in 1932, is a gift of the Class of 1907 in memory of William DeWitt Hyde, D.D., LL.D., president of the College from 1885 to 1917, and "as a mark of the enduring regard of all Bowdoin men for the leadership of their Presidents." The gateway forms one of the northern entrances to the campus from Bath Street.

The Franklin Clement Robinson Gateway, designed by Felix Arnold Burton and erected in 1923, is a memorial to Franklin Clement Robinson, LL.D., of the Class of 1873, for thirty-six years a teacher at Bowdoin College, and to his wife, Ella Maria Tucker Robinson. The gateway forms the northwestern entrance to the campus.

The Warren Eastman Robinson Gateway, designed by Felix Arnold Burton and erected in 1920 at the southwestern entrance to the campus, is a memorial to Lieutenant Warren Eastman Robinson, of the Class of 1910, who lost his life in the service of his country.

The Shumway Tree, a Rocky Mountain fir in memory of Sherman Nelson Shumway, A.M., LL.B., of the Class of 1917, generous benefactor and an Overseer of the College (1927-54), was replanted on the campus and dedicated in June 1955. It stands in front of Hawthorne-Longfellow Hall.

The Simpson Memorial Sound System, the gift of Scott Clement Ward Simpson, of the Class of 1903, and Mrs. Simpson, is dedicated to the memory of their parents. The system was installed in Gibbon Hall in 1954. A fund for its maintenance was established by Mr. and Mrs. Simpson in 1955.

The Turner Tree, a maple in memory of Perley Smith Turner, A.M., of the Class of 1919, professor of education at Bowdoin (1946-56), was replanted on the campus east of Smith Auditorium by classmates and friends and dedicated in June 1957.

The Lou Tripaldi Training Room, in the Farley Field House, is a gift to the College by members of the Class of 1973 in memory of their classmate.

The William B. Whiteside Room, a reading room on the north side of the sixteenth floor of Coles Tower, is named in honor of William Bolling Whiteside, Frank Munsey Professor of History Emeritus and first director of the Senior Center, in recognition of Professor Whiteside's thirty-six years of service to the College and its students. The room, to be dedicated in the fall of 1990, is a gift from the Class of 1969 on the occasion of its twentieth reunion.

The Gerald Gardner Wilder Cataloging Room, in Hawthorne-Longfellow Library, is a memorial to Gerald Gardner Wilder, A.M., of the Class of 1904, librarian of the College from 1916 to 1944. The room is in the southeast area on the first floor.

The Philip S. Wilder Room, on the third floor of Hawthorne-Longfellow Hall, is named in honor of Philip S. Wilder, of the Class of 1923, in recognition of more than fifty years of devoted service to the College.

The Frank Edward Woodruff Room, in Sills Hall, is a memorial to Frank Edward Woodruff, A.M., a member of the Bowdoin faculty from 1887 to 1922. The room was provided in 1951 through the generous bequest of Edith Salome Woodruff.

General Information

BOWDOIN is an independent, nonsectarian, coeducational, residential, undergraduate, liberal arts college located in Brunswick, Maine, a town of 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 v-vii.

Accreditation: Bowdoin College is accredited by the New England Association of Schools and Colleges.

Enrollment: The student body numbers 1,350 students (57 percent male, 43 percent female; last two classes 54/46 percent and 55/45 percent); about 150 students study away one or both semesters annually; 90 percent complete degree within five years.

Faculty/Student Ratio: 1:11; the faculty numbers 125, 95 percent with Ph.D. or equivalent, and 13 athletic coaches.

Geographic Distribution in Entering Class: New England, 51 percent; Middle Atlantic states, 26 percent; Midwest, 8 percent; West, 7 percent; South, 5 percent; foreign, 3 percent. Forty-five states and 18 countries represented. Minority enrollment, 13 percent, and international enrollment, 3 percent.

Statistics: As of June 1990, 27,565 students have matriculated at Bowdoin College, and 20,888 degrees in courses have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni include 12,060 graduates, 2,038 nongraduates, 92 honorary graduates, and 260 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. Summer hours are from 8:30 A.M. to 4:00 P.M. A Campus Guide, which lists all administrative offices and their locations on campus, is available in the Moulton Union.

Telephone Switchboard: The College has a central telephone switchboard located in the Moulton Union. All college phones are connected to this switchboard. The number is (207) 725-3000.

COLLEGE CHARGES AND BILLING INFORMATION

College Charges 1990-91: The charges for tuition, room rent, board, and fees** for the college year 1990-91 are as follows:

	By Semester		Total For the Year
	Fall	Spring	
Tuition	\$7,523.00	\$7,522.00	\$15,045.00
Board	1,463.00	1,462.00	2,925.00
Room Rent			
Residence Halls	1,155.00	1,155.00	2,310.00
Pine and Harpswell			
Street Apartments	1,590.00 *	1,590.00 *	3,180.00 *
Other Apartments	1,318.00 *	1,317.00 *	2,635.00 *
Student Activities Fee	68.00	67.00	135.00
Health Insurance	70.00 +	70.00 +	140.00 +

* When normal occupancy is varied, rates may change accordingly.

** The College charges do not include costs for travel, books, or personal expenses; the student must budget for such items on his/her own.

+ Beginning in 1990-91, the College health insurance fee is mandatory for all students.

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.

College Bills: Statements and bills covering College charges will be sent to the student unless the cashier has been requested *in writing* to direct them to someone other than the student. Semester statements will be sent to *every* student regardless of the payment option selected. Information about payment options is on pages 66-68.

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 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 an 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: The tuition fee for the 1990–91 academic year is \$7,522.50 each semester or \$15,045 for the year. There is a per-course charge of \$1,880 for students who have permission to take fewer than three courses a semester. Students in the Class of 1991 or earlier classes who wish to register for fewer than three courses in their final semester must request permission to do so before July 1; if a later request is approved, a \$225 surcharge will be added to the student's tuition bill in the appropriate semester. 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. Work taken at other institutions to make up deficiencies in scholarship at Bowdoin or 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 76–81.

Room and Board: Entering first-year students are guaranteed housing. They may indicate their residence needs on a preference card issued by the first-year-student adviser during the summer preceding their arrival at Bowdoin. The assistant dean of students coordinates housing accommodations for the remaining classes. Sophomores, juniors, and seniors apply for residential housing in the spring semester yearly through a lottery system, the most equitable approach given the College's limited space for housing. Participants in the lottery establish eligibility with a deposit of \$100, which is subsequently applied toward their fall term bill. Students who participate in the housing lottery but then withdraw from College housing will forfeit their deposit.

Residence hall suites consist of a study and bedroom, provided with essential furniture. Students should furnish blankets and pillows; the College furnishes optional paid laundry service. 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.

The College owns a variety of apartments located near the campus. Rent for these apartments has been set at \$3,180 per student for Harpswell and Pine Street

apartments and \$2,635 per student for all others for 1990–91. Rent for residence-hall rooms and rooms in a fraternity house is \$2,310.

Board is \$2,925 for the year. These 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 full 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 undergraduates. In each academic year, the College collects a student activity fee of \$135. The cost of tuition, board, room, and fees amounts to about \$10,277.50 for the semester. To these items must be added the cost of textbooks, personal expenses (including travel), and fraternity expenses if applicable.

Health Care: The facilities of the Dudley Coe Health Center and the services of the College physician are available to all students.

To cover costs of treatment and care during the college year, in the health center or elsewhere, each student is required to have health and accident insurance through the College (the present group rate of \$70 per semester is subject to change). Coverage is year-round and can be extended to cover leaves of absence or study away.

Bills are rendered by the College for many medical services provided by the health center. Most of these costs are covered by the student health insurance available through the College. A pamphlet specifying the coverage provided by student health insurance is available from the cashier. 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. Failure to register a motor vehicle may result in a fine of \$25. 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 OPTIONS

Students and their parents or guardians may pay the college charges as they fall due each semester or in accordance with Bowdoin's ten-month installment plan. They may also arrange to pay the total due by using a mixture of these two payment arrangements.

The payment dates in the Bowdoin-sponsored payment plans cannot be deferred for the convenience of families using guaranteed student 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. Special problems or emergency situations can be discussed with the cashier at any time.

Students with unpaid bills may not register for or attend classes, nor are they eligible for academic credit, semester grade reports, transcripts, or degrees.

Option I

Payment by Semester: On about July 15, a bill will be sent for the tuition, board, room rent, and fees for the fall semester. Credits (funds actually received) and *tentative credits* (funds not yet received but expected to arrive) will also appear on the bill. Bowdoin scholarship grants, payments from the family, or any other cash payments are examples of credits. Non-Bowdoin scholarship aid that has been reported, payments arranged for under the Bowdoin Installment Payment Plan, etc., are examples of tentative credits. The balance due is the difference between all charges and all credits and tentative credits. The bill for the spring semester will be sent about December 15.

Late Payment Charge: The balance due each semester will be considered overdue if not paid within 15 days of the billing date, and any unpaid balance will be subject to a late charge of 12.5% per annum.

Option II

The Bowdoin Installment Payment Plan (IPP): The Bowdoin Installment Payment Plan spreads the charges for a full year over ten months, beginning July 1. This program is administered on behalf of the College by the Knight Insurance Agency, Inc., of 855 Boylston Street, Boston, Massachusetts 02116.

Eligibility: Any parent or guardian of a Bowdoin undergraduate is eligible for this plan.

Application Deadline: Eligible participants are urged to apply by June 15. Applications made after the start of the program (July 1) must be accompanied by an initial payment sufficient to become current with the regular payment schedule. Applications for the ten-month plan will not be accepted after August 15.

Amount to be Financed: The amount to be financed under IPP may not exceed the total net annual charges (total annual charges less scholarship and loans). If the amount to be financed is less than the net annual charges, the difference will appear as a balance due on the Bowdoin semester bill subject to the provisions of Option I. The minimum amount that can be financed is \$1,000.

Finance Charge: *A finance charge will be applied at an annual percentage rate of 10% beginning on August 1.*

Schedule of Payments: The first of ten monthly payments will be due on July

1, and subsequent payments will be due on the first day of each month thereafter until the entire unpaid interest and principal under IPP are paid.

Optional Payments: Additional optional payments over the basic schedule may be made at any time without penalty. The unearned finance charge will be rebated based on the actuarial method.

Application Fee: A \$45 nonrefundable application fee must be submitted when returning the IPP application.

Consumer Credit Sales Agreement: The parent and/or guardian must sign a Consumer Credit Sales Agreement providing for the payment of scheduled installments.

Payment Coupons: Parents or guardians will receive a book of dated coupons to identify each payment. Each monthly payment with coupon should be sent to the Knight Insurance Agency, Inc. (855 Boylston Street, Boston, Massachusetts 02116), which will handle the processing and accounting of the IPP for Bowdoin.

Interest Statements: Statements will be sent by the Knight Agency in January for the finance charges (interest) reportable on tax returns.

Delinquent Payments: In addition to the finance charge imposed under the IPP, a late charge of 5% of the monthly payment, or \$5.00, whichever is less, will be charged on any monthly payment in default for a period of 10 days or more.

Acceleration: If any payment is overdue by 30 days or more, Bowdoin shall have the right to declare the entire unpaid balance in the IPP account immediately due and payable. The acceptance of partial payments shall not be considered a waiver of any such default. Upon payment in full, the unearned finance charge, if any, will be rebated based on the actuarial method.

Insurance: Insurance coverage for IPP is optional and is offered independently of Bowdoin College by the Knight Insurance Agency, Inc.

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 which shares the common characteristic of intellectual commitment but within which there is a considerable range of backgrounds, interests, and talents.

One can analyze the profile of Bowdoin's most recent class and make a rough prediction of a particular student's chances for admission to the next class. In recent years, Bowdoin has admitted approximately one out of five candidates. Sixty percent of those admitted will have graduated from a public school, and 80 percent of this group will have ranked in the top 10 percent of their graduating class. Well over half of the independent-school graduates will have been in the

upper third of their class. 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 and a half years of laboratory sciences. Further, most will offer studies in arts, music, and computer sciences.

Candidates applying to Bowdoin College are evaluated individually by members of the admissions staff in terms of four general factors:

Academic Record: Bowdoin is particularly interested in the superior student who seeks out and has excelled in a demanding college preparatory curriculum. Emphasis is placed especially on academic performance in the junior and senior years of secondary school.

References: Because standardized test scores are an optional admissions requirement, school recommendations increase in importance. Bowdoin requires two recommendations: one from a recent English teacher attesting to the candidate's writing abilities, and one from a teacher who has instructed the candidate in a subject he or she hopes to pursue at Bowdoin. Perceptions of the candidate's motivation, joy in the learning process, creativity, determination, and aptitude help the admissions staff sort out the truly distinguished from the able.

Talent: Because of its small size and the variety of its academic and extracurricular offerings, the College is looking for a depth of talent and accomplishments in a few areas rather than surface involvement in many.

Class Composition: Rather than measure each individual candidate against fixed admissions standards, the College seeks a class full of differences: students with varied talents, of many backgrounds, from different places, with different points of view.

APPLICATION AND ADMISSION PROCEDURES

Early Decision: Each year Bowdoin offers admission to approximately one-third of its entering class through its Early Decision program. Those candidates who are certain that Bowdoin is their first choice should seriously consider this option since it may resolve the problem of college admission early in the senior year. Bowdoin is in agreement with other colleges regarding the general ground rules, which 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 may 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 can 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, an English Teacher Comments form, and an additional teacher comments form must be submitted to Bowdoin by November 15. Decisions on Early Decision applicants whose applications are complete by November 15 will be announced by late December.

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. It is Bowdoin's policy to fund all needy students who are admitted via Early Decision.

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.

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

6. Most candidates not accepted under the Early Decision program will automatically 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. A number of students, however, are denied admission at Early Decision time.

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 (\$40) as early as possible in the senior year. The deadline for receiving regular applications is *January 15*.

2. School Report: The college adviser'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 the English Teacher Comments form, which should be given to the English teacher for completion and returned as soon as possible and no later than January 15. A second teacher comments form is also required. If students have any outstanding strength, particularly academic, that they feel should be documented in their Bowdoin application, they should have their teacher, coach, or club adviser write

to Bowdoin directly. For a student matriculating at Bowdoin College, required references will become part of the permanent college file.

4. College Entrance Examination Board or American College Testing Scores: Applicants are not required to submit results of CEEB or ACT tests. A candidate's overall academic record will always be considered first, with motivation, discipline, personality, and sensitivity viewed as important factors. If submitted, the CEEB or ACT scores will probably be helpful to the Admissions and Student Aid Committee in reaching a decision, but they will play a secondary role. 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, ACT, and Achievement Test scores should complete the entire battery of examinations no later than January of the senior year. Bowdoin is particularly attracted to the student who seeks out and excels in a demanding college preparatory curriculum. Its policy regarding the CEEB or ACT test scores favors the student who is a superior achiever in the classroom but who may not fare so well on national standardized tests. Eighty-five percent of the public school graduates offered admission to the Class of 1994 ranked in the top 10 percent of their senior classes.

N. B. —Since 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, see page 299. Candidates' chances for admission are not diminished because of the lack of an interview, but many times the interview impressions prove helpful in reaching a decision. In the Bowdoin interview, students should be prepared to talk informally about their academic record (bringing an unofficial transcript is helpful), interests, talents, and goals. 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 mid-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 \$200 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 director 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 \$200 nonrefundable admissions deposit must accompany the deferral request.

Admission with Advanced Standing: Bowdoin participates in the CEEB Advanced Placement program and the International Baccalaureate Program and grants both advanced standing in courses and credit toward graduation to qualified students. Examinations in Advanced Placement subjects are given by the CEEB in May of each year, and students are granted placement or credit on the basis of their examination performance. In most departments, a score of 3, 4, or 5 results in students' being given credit for one or two semesters of college-level work in the subject; if students elect to continue that subject in college, they are given appropriate placement. A judgment on an entering student's departmental placement will be made during the course registration period through personal conferences with appropriate faculty members.

Candidates not offering Advanced Placement examination results may secure advanced placement by passing a qualifying examination at the College. Bowdoin recognizes the place of more advanced courses in secondary school and provides an opportunity for unusually qualified students to extend the range of work that they may do in school and college. Occasionally, students may gain sufficient credit to enable them to complete their college program in fewer than eight semesters. Applicants are strongly encouraged to take advantage of the Advanced Placement program and should request consideration for Advanced Placement and credit by arranging for all Advanced Placement Test scores to be sent to the Admissions Office.

A minimum grade of 5 is required to receive credit for the International Baccalaureate Program. In addition, to receive credit, students must take a higher-level course in the appropriate department and cannot take a lower-level course in the department.

Departments may opt to use the International Baccalaureate as a guide to placement only, not for credit. Departments may choose to require the taking of a placement exam before granting credit.

Credits Earned before Matriculation: 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.

Transfer Students: A limited number of students from other colleges and universities will be admitted each year to upperclass standing at Bowdoin. The

following information pertains to transfer candidates:

1. Candidates should file a transfer application by April 15 and include the \$40 application fee. Applicants must arrange to have submitted at the same time transcripts of their college and secondary school records, statements from deans or advisers 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. Candidates entering the junior year will be given preference. Two years of residence is required for a bachelor's degree from Bowdoin. Students who have completed more than four semesters of college work are not eligible to transfer. Candidates must present one full year of academic credit to be considered for transfer.

4. The funds available for transfer students are limited by commitments the College has already made to needy 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. One or two courses are charged at a special rate of \$1,000 and no more than two courses can be taken each semester. No financial aid is available for special students. Interested applicants should submit the completed special student form and enclose the \$40 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

Bowdoin is one of more than 1,000 colleges that ask candidates for financial aid to file information through the College Scholarship Service, CN6300, Princeton, New Jersey 08541. This organization has been formed to simplify

application procedures and to make decisions on awards as equitable as possible. Each applicant for financial aid must submit the Bowdoin Financial Aid Application (which is included with the Application for Admission) and must also obtain the Financial Aid Form (FAF) from his or her school and request the College Scholarship Service to forward a copy of this statement to Bowdoin. March 1 is the deadline for filing these applications (for Early Decision applicants, the Bowdoin Financial Aid Application should be filed by December 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 1989-90, approximately 38 percent of the entering class of 383 students received financial assistance. The amount of assistance intended to meet the individual's need is calculated from the information in the Financial Aid Form. The average award of grant and loan was about \$12,935. Additional material about the program of financial aid at Bowdoin may be found on pages 76-81. 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 Director of Admissions, Bowdoin College, Brunswick, Maine 04011; telephone (207) 725-3100.

Scholarships, Loans, and Financial Aid

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 repaying some part of what has been advanced to help them complete their college course. Grants will total about \$5,150,000 in 1990-91 and will be made to about 38 percent of the student body. All awards are made on the basis of satisfactory academic work and financial need, which is a requisite in every case. The financial aid program is coordinated by the director of student aid, to whom all applications, except those from students not yet enrolled in college, should be directed. Prospective first-year students should submit their applications to the director of admissions.

The College provides about \$1,000,000 to aid recipients each year from loan funds under its control; another \$750,000 in loan aid comes from private lenders under the terms of the Stafford program. Long-term loans continue to be an integral part of financial aid, supplementing scholarship grants. On the recommendation of the director of student aid, 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 set at 8%. Payment over a ten-year period is called for beginning 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 waiver of some payments for persons who become teachers and/or who serve in the Peace Corps or Vista. 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. Employment opportunities are open to all students who are interested, able, and willing to work. Commitments for employment are not made to first-year students until after the opening of college in the fall. 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 which can provide handicapped students and those receiving other forms of state aid with financial assistance to help with their educational expenses.

Prematriculation Scholarships: About 150 first-year students each year receive prematriculation awards to help them meet the expenses of their first year.

Recently the range of awards has extended from \$500 to \$20,000. 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 to the director of admissions 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 15.

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 Financial 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 later years if their grades each semester are such as to assure progress required for continued enrollment (see General Regulations, Section 8, page 84). In the junior and senior years, 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 full award must be made as an outright 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. 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.

Information on the availability of scholarship and loan funds may be obtained through the College's Student Aid Office. Questions regarding the establishment of such funds should be directed to the Development Office.

Loan Funds: Loans are offered as complementary aid to scholarships in almost every case. The College has a number of loan funds of its own through the generosity of a variety of donors, and these are listed in a separate publication along with scholarship and book funds.

Employment: 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. The annual student payroll is currently about \$600,000.

Graduate Scholarships: These awards are made to students who have completed their work at Bowdoin and are pursuing advanced study at other institutions. Application should be made in writing to the director of student aid. They are described below.

Graduate Scholarships

ARTS AND SCIENCES

Charles Carroll Everett Scholarship: A fund bequeathed by Mildred Everett in memory of her father, Charles Carroll Everett, D.D., of the Class of 1850, the net income of which is given to that graduate of Bowdoin College whom the president and faculty shall deem the best qualified to take a postgraduate course in either this or some other country. (1904)

Timothy and Lynn Hayes Scholarship Fund: A fund given by Timothy and Lynn Hayes for support of postgraduate or undergraduate studies in the social sciences, i.e., those branches of knowledge which deal with the institutions and functioning of human society and with the interpersonal relationships of individuals as members of society. (1970)

Guy Charles Howard Scholarship: A fund bequeathed to the College by Ethel L. Howard in memory of her brother, Guy Charles Howard, of the Class of 1898, the income of which is to be used to enable "some qualified student to take a postgraduate course in this or some other country, such student to be designated by the Faculty." (1958)

Henry W. Longfellow Graduate Scholarship: A fund given by the daughters of Henry W. Longfellow, of the Class of 1825—Alice M. Longfellow, Edith L. Dana, and Annie L. Thorpe—for a graduate scholarship "that would enable a student, after graduation, to pursue graduate work in some other college, or abroad if considered desirable; the work to be done in English, or general literature, and the field to be as large as possible—*Belles Lettres* in a wide sense. The student to be selected should be one not merely proficient in some specialty, or with high marks, but with real ability in the subject and capable of profiting by the advanced work, and developing in the best way." (1907)

The Wilmot Brookings Mitchell Graduate Scholarship: An award from a fund established by Hugh A. Mitchell, of the Class of 1919, "to honor the memory of my father and his love for Bowdoin." Professor Mitchell was a member of the Class of 1890 and from 1893 to 1939 Edward Little Professor of Rhetoric and Oratory. The award is made by the president upon recommendation of a committee composed of the three senior professors of the Department of English "to a member of each graduating class who has majored in English and intends to teach English, the winning candidate to be selected on the basis of

character as well as superior ability and talent for teaching." The award is to be used to help defray the costs of graduate work in a leading university in this country or England. (1965)

Galen C. Moses Postgraduate Scholarship: A fund bequeathed by Emma H. Moses in memory of her husband, a member of the Class of 1856, the income to be awarded and paid to the student most proficient in any natural science during his or her undergraduate course, who shall actually pursue a postgraduate course in such science at any recognized college or university; said income to be paid to such student for a period not exceeding three years, unless he or she sooner completes or abandons said postgraduate course. (1934)

O'Brien Graduate Scholarship: A fund given by Mrs. John Washburn, of Minneapolis, in memory of her uncles, John, William, Jeremiah, and Joseph O'Brien, for a "scholarship, preferably a graduate scholarship, for a student, or students, to be selected annually by the Faculty, who shall be deemed most suitable to profit by travel or advanced study, either in this country or abroad." (1937)

Nathan Webb Research Scholarship in English or English Literature: A fund bequeathed to the College by Dr. Latham True in memory of his wife's father, the Honorable Nathan Webb, LL.D., the income to be used to support a scholarship of \$1,200 annually. The recipient must have received an A.B. from Bowdoin, preferably be unmarried, and use the scholarship in the study toward a Ph.D. "If deemed advisable, the said scholarship may be awarded to the same student for two or three years in succession, but no longer." (1963)

LAW AND MEDICINE

Garcelon and Merritt Fund: An award from the income of this fund, established in memory of Seward Garcelon, of the Medical Class of 1830, and Samuel Merritt, of the Medical Class of 1843, is appropriated annually for medical scholarships. The larger part of the amount is awarded to students pursuing their studies in medical schools, and the remainder may be assigned to students in the College who are taking premedical courses; but, at the discretion of the Board of Trustees, all of the income available may be assigned to students in medical schools.

Awards are made only to worthy and struggling young students "in need of pecuniary aid," and preference is given to graduates and former students of Bowdoin College. Applications from those not graduates or former students of Bowdoin College, but who are residents of the state of Maine, may be considered after they have completed one year in medical school. (1892)

Henry Lincoln Johnson Scholarship Fund: A fund established by Helen B. Johnson, registrar emerita of the College, in honor of her father, Henry Lincoln Johnson of the Class of 1907, College physician from 1927 to 1947, to provide graduate scholarships for medical students who are residents of Maine.

George and Mary Knox Scholarship Trust: A fund created under the will of George B. Knox, of the Class of 1929, for scholarships to be used for Bowdoin graduates attending Harvard Business, Law, and Medical Schools. (1984)

Lee G. Paul Scholarship: A fund given by Lee G. Paul, of the Class of 1929, the income to be used to provide financial assistance to graduates attending the Harvard University School of Law and requiring financial aid.

To qualify for a scholarship award from this fund, a student must have been admitted to the College only after meeting all requirements for admission applicable to all candidates for admission and must have met during his or her undergraduate years at the College at least the minimum standards of performance expected of all students.

There is to be no discrimination either in favor of or against any student because of race, color, creed, sex, or disadvantaged background in the award of scholarships from this fund. (1964)

Dr. Clinton Noyes Peters and Alice F. Peters Medical Education Fund: A fund established by the will of Clinton N. Peters, M.D., of the Class of 1910 and the Medical School Class of 1914, the income of which is to be used to aid Maine-born medical students who are graduates of the College and have been accepted by or are attending medical school. Any funds not used for medical school scholarships shall be used for aid to Maine-born undergraduates who have indicated an intention to attend medical school.

Robinson-Davis Fund: A fund given in trust under the will of Beatrice R. Davis in memory of Frank W. Robinson and Dr. Horace A. Davis, the income to be used to provide graduate scholarships for students, preferably natives and residents of Maine. Forty percent of the income is to be used for those who intend to study and practice law. The balance is for those who intend to study and practice medicine. (1972)

Earl Kendall Van Swearingen Scholarship Fund: A fund established by the bequest of Eleanore Maria Van Swearingen, the income to be used to support a "scholarship or scholarships to be awarded to the best premedical students for their medical education." (1969)

MISCELLANEOUS

Harold Hitz Burton Student Book Fund: A fund given in honor and memory of the late Honorable Harold Hitz Burton, LL.D., of the Class of 1909, by members of the Bowdoin Club of Washington and others to assist needy Bowdoin undergraduates in the purchase of books required in their courses. Administered by the dean of students. (1967)

Class of 1940 Memorial Fund: A fund to be used for the assistance of students or for such other purposes as the president and Governing Boards may from time to time deem more useful. (1988)

Computer Loan Fund: A loan fund established to enable members of the faculty and administrative staff to purchase computer equipment for professional and personal use. The fund is administered by a committee comprising the treasurer, the dean of the faculty, and the chair of the academic computing center committee. (1984)

Davis Fund: A fund established by Walter G. Davis to encourage undergraduate interest in international affairs. Administered in such manner as the president of the College may direct. (1934)

Mason-Le Cannellier Fund: A fund established in honor of William R. Mason and Jean and Monique Le Cannellier "for the purpose of providing loans and/or grants to admitted, nonmatriculated first-year students (with preference to those of middle-income families) to facilitate travel or the pursuit of an alternative non-academic experience for a few months or a year before the students commence studies at Bowdoin." Awards are made at the discretion of the director of admissions. (1982)

W. Cranston Brewer Memorial Fund: A fund to help individual Bowdoin undergraduates at a time of unexpected needs. (1988)

Dean Paul Nixon Discretionary Fund: A fund established by E. Jeffrey Gilman, of the Class of 1940, and his wife, Barbara Drummond Gilman, in honor and memory of Paul Nixon, who joined the faculty of Bowdoin in 1909 and served as dean of the College from 1918 to 1947. The fund is administered by the dean of students, "with an award to be made whenever the dean feels that a student deserves encouragement and a 'pat on the back'—not necessarily for a great action but for any of those moments which call for a 'pat on the back.'" (1981)

John L. Roberts Fund: A fund given by John L. Roberts, of the Class of 1911, to assist some underprivileged scholar, other than a teacher or one contemplating teaching, to do research in any field he may choose. (1958)

Richard White Foundation Fund of Bowdoin College: A fund established by the Richard White Foundation to provide food and recreation at Thanksgiving and Christmas to the "two members of the freshman class most in economic need." (1978)

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 adviser, 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 science, 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 advisers is a vital part of this educational experience.

REQUIREMENTS FOR THE DEGREE

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

1. successfully passed thirty-two courses;
2. completed a departmental major or majors, an interdisciplinary or coordinate major, or a student-designed major (a departmental minor may be completed with any of the preceding);
3. spent four semesters (passing at least sixteen courses) in residence, at least two of which will have been during the junior and senior years;
4. 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.

GENERAL REGULATIONS

1. 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 permission of the Deans' Office. 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 Registrar's Office 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.

2. 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 Deans' Office may authorize makeup of the examination.

3. Course Grades: Course grades are High Honors, Honors, Pass, Credit, and Fail. High Honors indicates excellent work. Honors indicates good work. Pass indicates satisfactory work. Credit indicates passing work, without further distinction as to quality, in a course elected by a student to be graded on a Credit/Fail basis. Fail indicates unsatisfactory work. In independent study courses that will continue beyond one semester, instructors shall 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. The faculty has approved a change in the grading system that will take effect in September 1991.

4. 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, 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.

5. 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.

6. Grade Reports: A report of the grades of each student is sent to the student at the close of each semester.

7. The Dean's List: Students who receive grades of Honors or High Honors in four regularly graded courses in a given semester are placed on the Dean's List.

8. Deficiency in Scholarship: Students are expected to make “normal” progress toward the degree. “Normal progress” is defined as passing 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 may enroll after a suspension of at least one semester and with the approval of the dean.

The records of students who fail more than one course are reviewed by the Recording Committee at the end of each semester. Students who fail three or more courses at the end of the first semester of the first year or who fail two or more courses at the end of any other semester are normally dismissed from the College. Students for whom dismissal is waived must take and pass four courses the following semester. Their records will be reviewed by the Recording Committee at the end of that semester. If they violate the terms of the waiver, their permanent dismissal will likely result.

Dismissed students may apply for readmission after an absence of at least one semester. A normal readmission application consists of a petition from the dismissed student explaining his or her personal growth and development during the period away from Bowdoin. In addition, a student must usually submit two letters of reference from nonrelatives in positions to validate his or her experiences, commenting on the student’s readiness to resume quality scholarship.

Students who have been dismissed for academic deficiency are ineligible for financial aid during the first semester after readmission.

Students who merit dismissal a second time for academic failures may be permanently dismissed from the College.

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

10. 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.

11. Leave of Absence: A student in good standing may, with the approval of his or her adviser, 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 April 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.

ADVISING SYSTEM

Each student is assigned an academic adviser, generally from the faculty, at the start of the first year. Students generally maintain this relationship for the first two years. Whenever possible, the dean of students assigns advisers on the basis of

students' intellectual interests. Advisers and students meet regularly during orientation prior to fall semester's classes and on an individual basis thereafter. During the first week of classes, the student selects courses and receives approval from the adviser 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.

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 and 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 can 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, physics, psychobiology, and certain environmental studies courses.

Social and Behavioral Sciences: Afro-American studies, economics, government, psychology, sociology and anthropology, and certain Asian studies, environmental studies, history, and women's studies courses.

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.

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 cultures fundamentally different from their own and to open their minds to different ways in which other people perceive and try to cope with the challenges of life. Though courses treating North American and European topics will not normally count toward this requirement, courses on Afro-American or native American cultures will meet the requirement when the emphasis is clearly on those cultures and their differences from the predominant culture of the United States. *Language courses do not meet this requirement.* Approved courses are indicated by a swash (§) in the list of "Courses of Instruction" in this catalogue.

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. 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. Seniors 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 cannot continue registration.

Options for major programs are described below.

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 requirements for interdisciplinary majors. For descriptions of these interdisciplinary majors, see pages 189–91.

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 Record-

ing Committee. No student may apply for a student-designed major after the end of the sophomore year.

Coordinate Major

The coordinate major is currently offered only in relation to the Environmental Studies Program. For a specific description of this major, see pages 154–59.

Departmental Major and Departmental Minor

Students may fulfill the major requirements of one department and meet the minor requirements of any other department or program, subject to the approval of that department or program.

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 adviser 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" for Satisfactory 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 art, 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.

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 Recording Committee and the student's major department; requests must be submitted to the registrar prior to the Friday before spring vacation of the year preceding attendance. Many specific programs and requirements for participation in them have been approved (see page 93 for information on the Twelve-College Exchange).

Foreign Study: Students may apply for study in virtually any country. The Deans' Office has a list of over 125 programs that have been approved; students should consider these first. Information, including student evaluations, is also available from the Deans' Office.

Some language study is encouraged for programs in countries with primary languages other than English but is not required by Bowdoin, although individual programs may have their own requirements. Deadlines for application to foreign programs vary; a student should consult with the dean well before the spring vacation of the year preceding anticipated participation.

Domestic Study: Study at other institutions in the United States should be considered primarily as an extension of Bowdoin's academic program. Therefore, a student's academic motivation is the essential criterion for approval. Bowdoin has a number of defined exchange programs; to attend any institution not currently approved, a student must, after consultation with his or her adviser, present evidence that the study requested will be undertaken in at least a comparable academic environment. It is the student's responsibility to apply to Bowdoin and to the other institution for acceptance.

Approved programs include the City Semester at Boston University, Williams College/Mystic Seaport Program, the National Theater Institute, Washington Semester programs of American University and Boston University, SEA Semester at Woods Hole, and the Twelve-College Exchange (see page 93). Forms for and information about these programs are available in the Deans' Office.

In all off-campus study programs, credit will be transferred only for grades of "C-minus" or better, and an official transcript must be submitted to Bowdoin's registrar.

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. It is based upon Honors grades in at least a majority of major courses, Honors grades in any departmental special major requirements, and Honors grades in independent study in the major 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 a student's final six semesters at Bowdoin, except that a student who receives a grade of Fail 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. No student who has studied at Bowdoin for fewer than six semesters is eligible. Exceptions are considered by the Recording Committee.

A degree *cum laude* shall be awarded to a student who receives at least 75 percent Honors or High Honors. Within the honor grades, there must be two High Honors for each 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 student's grades must be High Honors in addition to the High Honors balancing the Passes.

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

SPECIAL PROGRAMS

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. The recommended course may be found on page 106.

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 interdiscipli-

nary program, involving course work and fieldwork at Bowdoin and in the North.

Beijing Program

Current Chinese politics have led to the temporary suspension of the Beijing Program. Students, however, are encouraged to spend their junior year studying at an approved program in the People's Republic of China, Taiwan, or Hong Kong. When the situation permits, the New York/New England Consortium (comprising Bates, Bowdoin, Colby, Hampshire, Hobart & William Smith, Mount Holyoke, and Williams colleges) will reestablish the program in Beijing.

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. Admission is assured with the recommendation of the coordinator of the 3-2 programs. Then 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 does not assure financial aid.

To fulfill the requirements of these programs, the student must start planning early. All students must take **Physics 103, 223, 227, 228, Chemistry 101, 102, Mathematics 161, 171, 181, and Computer Science 101**. In addition, a student taking the physical sequence is expected to complete **Physics 300** and an additional course in mathematics, physics, chemistry, or computer science. For the chemical sequence, **Chemistry 251, 252** is expected. The student should also have at least ten semester courses outside of physics, mathematics, chemistry, and computer science. Economics is strongly suggested.

Students who wish to complete four years at Bowdoin may apply to Columbia for admission on a 4-2 program. Students who have Honors grades in the sciences and are recommended by the coordinator are automatically admitted.

Students who wish to apply as regular transfer students into the junior year of any other engineering program must make the necessary arrangements themselves. Such students should apply to the Recording Committee for permission for study away. Upon the successful completion of the engineering program, a Bowdoin degree is awarded.

Because this program requires tight scheduling of courses, students should consult regularly with Guy T. Emery of the Department of Physics.

First-year Seminars

The importance of good writing to a student's success in college is obvious. The purpose of the first-year seminar is to introduce the academic discipline in which the seminar is offered and, in a broader sense, to contribute to a student's 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 the student's individual skills—his or her ability to read texts effectively and to write prose that is carefully organized, concise, and firmly based upon evidence.

Each year a number of departments offer first-year seminars. Enrollment in each is limited to sixteen 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. Students with serious writing problems are identified by the Deans' Office and are advised to enter a special tutorial program.

Seminars to be offered in 1990–91 are listed below and are described under the appropriate departments:

<i>Fall</i>	<i>Spring</i>
Art History 10,1	Art History 10,2
Classics 12	English 20, 21, 22, 23,
English 10, 11, 12, 13,	24, 25, 26
14, 15, 16	History 10, 23
Geology 17	Philosophy 13
German 11	Religion 16
Music 10	Romance Languages 11
Philosophy 15, 16	
Religion 15	

Health Professions

Students contemplating the study of medicine, dentistry, or one of the other health professions are advised to discuss their undergraduate course with the adviser for the health professions, Roy E. Weymouth, Jr., M.D., College physician. 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.

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 classical art and archaeology as well as Greek and Latin literature. Students must take four courses, and may take a fifth. The center operates two semesters each academic year. Further information about the program may be obtained from Barbara Weiden Boyd in the Department of Classics.

Intercollegiate Sri Lanka Educational (ISLE) Program

Bowdoin is the agency college of the ISLE Program, a one-semester program

located in Kandy, Sri Lanka, formally affiliated with the University of Peradeniya (formerly the University of Sri Lanka). Bates, Carleton, Hobart & William Smith, and Swarthmore are sponsoring colleges. The program is designed to provide an authentic intellectual and cultural experience for fifteen to twenty students of advanced standing with demonstrated academic interests (particularly in religion, philosophy, sociology, anthropology, and history) in South Asia. Courses of instruction include Theravada Buddhist thought and practice; conversational Sinhala; and the social, economic, and political history of Sri Lanka. Other courses in the humanities and social sciences are offered periodically, and students are required to complete an independent study. An optional second semester of individually tailored studies is also available for exceptional students. While in Sri Lanka, students live with host families in Kandy and are encouraged to travel extensively in India and in Southeast Asia during program breaks.

The program was established by Bowdoin in 1981. Interested students should consult with John C. Holt of the Department of Religion and Asian Studies Program.

Legal Studies

Students considering the study of law should consult with the staff of 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. They can advise students on the best ways to design a coherent liberal arts program that relates to the study of law and allied fields.

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.

South India Term Abroad (SITA) Program

Bowdoin is a member of a nine-college consortium, including Amherst, Bates, Dickinson, Franklin & Marshall, George Washington, Hobart & William Smith, Smith, and Whittier, participating in the operation of an annual program of undergraduate studies in Tamil Nadu, India. The program provides a one-semester standardized curriculum of courses designed for non-South Asian specialists and an optional second semester of individually tailored studies for exceptional students.

The Bowdoin faculty adviser for the program is Sara A. Dickey, Department of Sociology and Anthropology and Asian Studies Program.

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. Required courses include Swedish language and *The Welfare State and Public Policy*. A sampling of elective courses for 1990-91 includes *Organizational Theory and Labor History*, *Women and Equality*, *Scandinavia in World Affairs*, and *The Economy in the Welfare State*. The two-week orientation and some courses involve extensive field trips. Students reside with Swedish families in and near Stockholm or in campus dormitories. The Bowdoin faculty adviser is David J. Vail, Department of Economics.

Teaching

Students with an interest in teaching in schools or 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.

Twelve-College Exchange

Bowdoin has joined with Amherst, Connecticut, Dartmouth, Mount Holyoke, Smith, Trinity, Vassar, Wellesley, Wesleyan, Wheaton, and Williams to form the Twelve-College Exchange program. Students from one college may apply to study for a year at one of the other colleges.

Bowdoin students wishing to participate in the exchange for the 1991-92 academic year should make application to the office of the dean of the College by February 1, 1991. Detailed information on the course offerings of the participating colleges is available from the Deans' Office. Application is normally made for two semesters. The exchange affords students the opportunity to take courses that are not offered at Bowdoin or to study specialized aspects of their major fields of concentration with faculty members who have achieved preeminence in those specialties. Course work satisfactorily completed at any of the participating colleges will receive credit toward a degree at Bowdoin.

Courses of Instruction

Arrangement: The departments of instruction in the following descriptions of courses are listed in alphabetical order.

Time and Place of Classes: A schedule containing the time and place of meeting of all courses will be issued before each period of registration.

***Year Courses:** Courses marked with an asterisk are year courses and if elected must be continued for two consecutive semesters.

[Bracketed Courses]: All courses that cannot be scheduled for a definite semester are enclosed in brackets.

§Non-Eurocentric Studies Requirement: Courses marked with a swash will satisfy one semester of the non-Eurocentric studies requirement.

Independent Study: See page 87 for a description.

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

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

10-49	First-year seminars
50-99	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

Afro-American Studies

Administered by the Committee on Afro-American Studies

ASSOCIATE PROFESSOR STAKEMAN, *Director*

Afro-American 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 Afro-American scholarship and allows the student to integrate effectively the perspectives of several academic departments at the College.

Requirements for the Major in Afro-American Studies: The major in Afro-American studies consists of four required core courses, a concentration of four

additional courses, and a one-semester independent study project. The core courses—**Afro-American Studies 101 or 102; Sociology 208; English 275 or 276;** and one of the following: **History 241, 245, 261, or 262**—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 Afro-American studies.

The four-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 Afro-American Studies Program. Alternatively, the student and the director may devise a concentration around another specific theme and submit a proposal to the Committee on Afro-American Studies for its approval. In addition, the independent study project, normally completed in the senior year, allows students to conduct research into a particular aspect of the black experience. Students should consult with the director concerning courses offered in previous years that may satisfy the program requirements.

Coordinate Major in Afro-American Studies: The purpose of the coordinate major is to encourage specialization in Afro-American studies within the framework of a recognized academic discipline. This major is, by nature, interdisciplinary, and strongly encourages independent study. The coordinate major entails completion of an ordinary departmental major in sociology or anthropology, history, economics, or government. The student is expected to take those courses within the major department that are cross-listed in the Afro-American Studies Program insofar as departmental major requirements permit. In addition, the student must take **Afro-American Studies 101** and four other courses outside the major department approved by the director of Afro-American studies. Students electing the coordinate major are required to carry out scholarly investigation of a topic relating to the Afro-American experience; not more than one of the elective courses may normally be an independent study course (**Afro-American Studies 290 or 400**).

[§51. Myth and Heroic Epic of Africa.]

§101. **The African Diaspora.** Fall 1990. MR. STAKEMAN.

The spread of African ideas and people of African descent to the rest of the world from ancient Egypt through the slave trade era, with emphasis on the impact of Africa on classical Greek, Roman, and Byzantine civilizations; the development of classical African civilizations; the dispersal of Africans before and during the slave trade; and the development of African-American societies in the New World. (Same as **History 161**.)

- §102. The Autobiography of African America.** Fall 1991. MR. STAKEMAN.
A survey of the history of African Americans as it is revealed through the autobiography, one of the first literary genres developed by African Americans. This course uses the autobiography as a source to examine African American thought and experience. Works to be covered include such classic autobiographies as *Equiano's Travels*, *Narrative of the Life of Frederick Douglass*, Richard Wright's *Black Boy*, and *The Autobiography of Malcolm X*, among others. (Same as **History 131.**)
- §201. The Pan-African Idea.** Spring 1991. MR. STAKEMAN.
The exchange of political and cultural ideas among African and New World societies in the nineteenth and twentieth centuries, and the various attempts to unite those societies (Pan-Africanism). Topics include the Haitian slave revolt and its effects on slaves in the United States, emigrationism, black missionary efforts, Pan-African congresses, the international aspects of the Harlem Renaissance, Marcus Garvey, black anti-imperialist movements, international aid to African nationalist movements, and Pan-African religions (Rastafarianism, Santeria). (Same as **History 242.**)
- §208. Race and Ethnicity.** Fall 1990. MR. MCEWEN.
The social and cultural meaning of race and ethnicity, with special 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 between the status of racial and ethnic minorities in the United States and their status in other selected societies. (Same as **Sociology 208.**)
Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.
- §241. The Civil Rights Movement.** Fall 1992. MR. LEVINE.
This course 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.**)
- §245. African-American Religion and Its Music: Redemption Songs.** Spring 1992. MR. STAKEMAN.
By focusing on black religious music in the Americas, this course considers how specific historical contexts have shaped and reflected the development of a distinctly Afro-American church, theology, and folk religion. The course examines the different interactions of African and European cultures which have produced a variety of Afro-American

cultures, the social role of the black minister, the social stratification of black Protestant denominations, the social roles within church services, the social welfare functions of churches, and black millenarianism. Topics include slavery and the spiritual, the black peasantry and folk blues, urbanization and gospel music. (Same as **History 245.**)

§261. African Kingdoms. Fall 1990. MR. KILLION.

An introduction to African political and economic development prior to large-scale European penetration of the continent. The principal focus is the relationship between economic growth and social organization in the Sudanic belt, Ethiopia, and Southern Africa before 1800. Topics include the growth of long-distance trade, the origins and structure of divine kingship, the expansion of slavery and serfdom, and the impact of Islam. Readings emphasize original African sources where possible. (Same as **History 261.**)

§262. Africa and the Slave Trade: 1500–1850. Spring 1991.

MR. KILLION.

The roots of contemporary African economic dependency often are traced to the impact of the Atlantic slave trade during the period from 1500 to 1850. This course focuses on the slave trade from an African perspective, exploring the relationship between the trade and economic and political change in all parts of Africa. (Same as **History 262.**)

[**§275. African-American Fiction.**]

(Same as **English 275.**)

[**§276. African-American Poetry.**]

(Same as **English 276.**)

301. Race and Gender in American Society: A Dialogue. Fall 1991.

MS. MAY AND MR. STAKEMAN.

An examination of the similarities and differences in the ways race and gender have affected American society. Topics to be discussed include the nature of inferiority (biological and religious theories of inferiority, visual representations of inferiority), control over the body of another (marriage, slavery, plantation mistresses and slaves), race and gender in the organization of labor (from labor unions to affirmative action), and the gender/race politics of resistance (the suffrage debates, racism in the feminist movement, sexism in the black movement). The course emphasizes the debate that has occurred around each of these issues, and calls for classroom debates, frequent short writing assignments, and student participation in discussion. (Same as **Women's Studies 301.**)

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

§334. Research in Twentieth-Century Afro-American History.

Fall 1992. MR. LEVINE.

Bowdoin has recently acquired extensive source collections on this subject: papers of the Congress of Racial Equality of the Student Non-Violent Co-ordinating Committee, White House Central Files of Civil Rights during the Kennedy and Johnson administrations, F.B.I. surveillance records, and much more. This seminar involves research centering on this material.

Prerequisite: Any course in twentieth-century U.S. history. Preference will be given to students with previous background in Afro-American history. (Same as **History 334.**)

§335. The Afro-American Critique of America. Fall 1991.

MR. STAKEMAN.

Afro-Americans have had to confront American racism for three centuries. Their perceptions of America, the "Negro problem," and strategies for the improvement of black life have spanned the radical/liberal/conservative political spectrum. This course asks students to read and analyze the writings of black intellectual activists, including black abolitionists (Frederick Douglass), black progressives (Booker T. Washington, W. E. B. Du Bois, Marcus Garvey), literary activists (James Weldon Johnson, Langston Hughes, Zora Neale Hurston), civil rights-era activists (Martin Luther King, Malcom X, the Black Panther Party), and post-civil rights theorists (Manning Marable and Thomas Sowell). (Same as **History 335.**)

290. Intermediate Independent Study.**400. Advanced Independent Study and Honors.****CROSS LISTINGS****Anthropology****§233. Peoples and Cultures of Sub-Saharan Africa. Fall 1990.**

MS. CIEKAWY.

(See **Anthropology 233**, page 246.)**Government and Legal Studies****102. Caribbean Forms. Fall 1990. MR. POTHOLM.**(See **Government and Legal Studies 102**, page 168.)**§223. African Politics. Fall 1990. MR. POTHOLM.**(See **Government and Legal Studies 223**, page 170.)

History

- 232. History of the United States, 1824–1877.** Fall 1990.
MR. STEINBERG.
(See **History 232**, page 180.)
- 247. American Women in the Twentieth Century.** Every other year.
Spring 1991. MS. MAY.
(See **History 247**, page 182.)
- §256. Comparative Slavery.** Fall 1992. MR. WELLS.
(See **History 256**, page 183.)
- §263. Nationalism in Africa: From Resistance to Nation-Building.**
Spring 1991. MR. KILLION.
(See **History 263**, page 184.)
- §266. The African Poor.** Fall 1990. MR. KILLION.
(See **History 266**, page 184.)
- 330. Reform Movements in American History.** Fall 1990.
MR. STEINBERG.
(See **History 330**, page 187.)

Music

- §100. World Music.** Fall 1990. MS. SMITH.
(See **Music 100**, page 201.)

[**121. History of Jazz.**]

Sociology

- 203. Families in American Society.** Spring 1991. MS. BELL.
(See **Sociology 203**, page 239.)
Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.
- 206. Urban Sociology.** Spring 1992. MS. FLOGE.
(See **Sociology 206**, page 240.)
Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.
- 213. Social Stratification.** Spring 1991. MR. ROSSIDES.
(See **Sociology 213**, page 241.)
Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.
- 218. Sociology of Law.** Fall 1990. MR. MCEWEN.
(See **Sociology 218**, page 241.)
Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

251. **Sociology of Health and Illness.** Every fall. Ms. BELL.

(See **Sociology 251**, page 242.)

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor. Not open to students who have previously taken **Sociology 151**.

Women's Studies

242. **Sexuality and Reproduction.** Spring 1991. Ms. MAY.

(See **Women's Studies 242**, page 250.)

Art

ASSOCIATE PROFESSOR WETHLI, *Chair*; PROFESSORS CORNELL AND OLDS;
ASSOCIATE PROFESSOR WEGNER, *Director, Art History Division*;
ASSOCIATE PROFESSORS LUTCHMANSINGH AND MCKEE;
ASSISTANT PROFESSORS DOCHERTY AND LOFQUIST;
VISITING LECTURER GLASS; INSTRUCTOR MARSTINE

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 mankind'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: 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 189-91.

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 105.

Courses in the History and Criticism of Art

10,1. First-year Seminar: Utopia in Art. Fall 1990.

MR. LUTCHMANSINGH.

After a close reading of one of the founding texts of the concept, Thomas More's *Utopia*, this course examines the operation of the utopian principle in several examples of modern art, architecture, and urban planning. These include the work of artists such as Boullée and Ledoux, Ruskin, Morris, Crane, Puvis de Chavannes, Malevich, and Mondrian; the arts and crafts movement, the garden city movement, futurism, and Russian constructivism; and selected examples of visionary film.

10,2. First-year Seminar: Rembrandt van Rijn. Spring 1991.

MS. WEGNER.

This seminar examines the art and life of the Dutch artist Rembrandt van Rijn (1606–69), focusing on his depictions of everyday life, his approach to portraiture, and his unique interpretations of biblical subjects. Writing assignments stress learning how to “read” images both for style and for content. This course includes a field trip to Boston to view original prints and paintings by the artist.

101. Introduction to Western Art. Fall 1990. MR. OLDS.

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.

§110. Introduction to East Asian Art. Spring 1991. 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.**)

[§120. Introduction to South Asian Art.]

(Same as **Asian Studies 120.**)

204. History of the Graphic Arts. Fall 1990. MR. OLDS.

This course traces the origins and development of the graphic arts in Europe and America from the Renaissance through the modern era. The class studies a variety of print media—including woodcuts, engravings, drypoints, etchings, lithographs, and serigraphs—as these have been employed by masters such as Dürer, Rembrandt, Goya, Daumier, Whistler, Picasso, and Warhol. Students have an opportunity to examine

original master prints in the collections of the Bowdoin College Museum of Art, and to see certain techniques demonstrated in the graphic arts studio of the Department of Art. The course may count toward the major or minor in art history, and is particularly recommended for students majoring in studio art.

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

209. Introduction to Classical Archaeology. Fall 1991. 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.**)

210. Introduction to Classical Archaeology. Fall 1990.

MR. HIGGINBOTHAM.

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. Materials studied includes mural painting, architecture, sculpture, and the "minor arts." (Same as **Archaeology 102.**)

211. The Birth of Greek Art. Spring 1992. MR. SMITH.

This course examines the art of archaic Greece (seventh and sixth centuries B.C.) and considers the qualities characteristic of archaic Greek culture. Primary emphasis is placed on the archaeological evidence from a variety of media: architecture, sculpture, and vase painting. Literary and historical sources provide a broader cultural context. (Same as **Archaeology 307.**)

[**212. Medieval Art.**]

222. Art of the Italian Renaissance. Fall 1990. MS. WEGNER.

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

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

226. Northern European Art of the Fifteenth and Sixteenth Centuries. Spring 1991. MR. OLDS.

A survey of the painting of the Netherlands, Germany, and France. The development of a naturalistic style in Flanders by Robert Campin, Jan

van Eyck, and Roger van der Weyden, the spread of their influence over northern Europe, the confrontation with the classical art of Italy occurring around 1500 in the work of Dürer and others, and the continuance of a native tradition in the work of Hieronymus Bosch and Pieter Bruegel the Elder are major topics. The changing role of patronage and the rise of specialties such as landscape and portrait painting are discussed in reference to the works of individual artists.

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

232. Baroque Art. Spring 1991. Ms. WEGNER.

The art of seventeenth-century Europe. The naturalistic and classical revolution in painting carried out by Caravaggio, Annibale Carracci, and their followers in early seventeenth-century Rome, and the development throughout Europe of these trends in the works of Rubens, Bernini, Georges de la Tour, Poussin, and others form one major theme of the course. The second is the rise of an independent school of painting in Holland. The development of Dutch landscape, still-life, genre, and portrait painting is discussed in relation to artists such as Frans Hals, Jan van Goyen, Jacob van Ruysdael, and Jan Vermeer. The unique art of Rembrandt is studied in this context. Connections between art, religious ideas, and political conditions are stressed.

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

242. European Art of the Nineteenth Century. Fall 1990.

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. The art criticism of Winckelmann, Baudelaire, Ruskin, Zola, and Aurier, the changing relationship of art and artists to society, and the late-nineteenth-century sources of modernism are also discussed.

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

252. Modern Art. Fall 1990. Mr. LUTCHMANSINGH.

A study of the rise and development of the modernist movement in visual art in Europe and the Americas, beginning with the major figures of post-impressionism and examining in succession expressionism, fauvism, cubism, futurism, constructivism, Dada, surrealism, the American affinities of these movements, the Mexican muralists, and the Canadian Group of Seven. A theoretical ground for this study is the definition of "modernism" and the problems presented by its social situation, its relation to other elements of culture, its place in the historical tradition of Western art, and its invocation of archaic, primitive, and Oriental cultures.

Prerequisite: **Art 101, 242,** or consent of the instructor.

254. Contemporary Art. Spring 1991. MR. LUTCHMANSINGH.

A study of the art of Europe and the Americas since World War II, with emphasis given to the New York school. An introductory overview of modernism is followed by a more detailed examination of abstract expressionism and the minimalist developments that it partly inspired; pop, op, kinetic, conceptual, and environmental art; European abstraction; and the resurgence of various forms of figuration. The course 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 and its historical attitude.

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

262. American Art from Colonial Times to the Civil War. Spring 1991.

MS. MARSTINE.

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.

264. American Art from the Civil War to the Present Day. Fall 1990.

MS. MARSTINE.

A continuation of **Art 262**. The course emphasizes architecture through Richardson, and the American tradition in painting and sculpture in the late nineteenth and twentieth centuries. Homer, Eakins, Ryder, Sargent, Whistler, Sloan, Wyeth, and other outstanding and representative artists of the period are included.

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

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 consent 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.

332. Painting and Society in Spain: El Greco to Goya. Fall 1990.

MS. WEGNER.

This seminar focuses on painting in Spain from the late sixteenth to the early nineteenth century, with special emphasis given to the works of El Greco, Velázquez, and Goya. The course examines their art in the light of Spanish society, particularly the institutions of the Catholic church and

Spanish court. Spanish mysticism, popular custom, and Enlightenment ideals as expressed in art are treated. Readings in the Bible, Spanish folklore, and artists' biographies.

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

364. Studies in American Art: Nineteenth-Century American Landscape Painting. Spring 1991. Ms. MARSTINE.

This seminar examines nineteenth-century American landscape painting within its historical and cultural context. Artists to be considered include Thomas Cole, Frederic Church, Fitz Hugh Lane, and George Inness. Readings in primary sources and recent exhibition catalogues. Field trips to the Bowdoin College Museum of Art.

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

380. Pre-Raphaelite Literary Painting. Spring 1991.

MR. LUTCHMANSINGH.

After an examination of several approaches to the issue of the interrelationship of verbal text and pictorial image, this course considers the representation in Pre-Raphaelite and associated painting, graphic art, and book illustration of themes from Arthurian romance, Dante, Shakespeare, Keats, Byron, Tennyson, Robert and Elizabeth Browning, Bulwer-Lytton, Patmore, Dante and Christina Rossetti, Swinburne, and Morris.

Prerequisites: **Art 101** and **242**, or consent of the instructor.

291-294. Intermediate Independent Study in Art History.

ART HISTORY FACULTY.

401. 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. Majors are also strongly advised to include study of history, philosophy, religion, literature, and music among their remaining courses.

Requirements for the Minor in Studio Art: **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 juniors and seniors fulfilling requirements of the studio major or minor.

- 150. Drawing I.** Fall 1990. Ms. LOFQUIST. Spring 1991. Ms. LOFQUIST AND MR. WETHLI.

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.

- 160. Painting I.** Fall 1990. Ms. LOFQUIST. Spring 1991. 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.

Enrollment limited to 25 students.

- 170. Printmaking I.** Fall 1990. 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 consent of the instructor. Enrollment limited to 20 students.

- 180. Photography I.** Spring 1991. 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.

- 190. Architectural Design I.** Spring 1991. 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.

- 250. Drawing II.** Fall 1990. MR. WETHLI.

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**.

260. Painting II. Spring 1991. MR. CORNELL.

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

Prerequisite: **Art 160**.

270. Printmaking II. Spring 1991. MR. CORNELL.

Further exploration of intaglio printmaking and monotype.

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

280. Photography II. Fall 1990. 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 consent of the instructor.

[**350. Drawing III.**]

[**351. Drawing IV.**]

360. Painting III. Spring 1991. MS. LOFQUIST.

A continuation of **Art 260**, with increasing emphasis on individual projects in painting.

Prerequisite: **Art 260** or consent of the instructor.

361. Painting IV. Spring 1991. MS. LOFQUIST.

A continuation of **Art 360**.

Prerequisite: **Art 360** or consent of the instructor.

370. Printmaking III. Spring 1991. MR. CORNELL.

A continuation of **Art 270**.

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

295–299. Intermediate Independent Study Studio. STUDIO FACULTY.

401. Advanced Independent Study and Honors Studio. STUDIO 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

ASSOCIATE PROFESSOR SMITH, *Chair*; ASSOCIATE PROFESSOR HOLT;
 ASSISTANT PROFESSORS DICKEY, GILDAY, AND HARPER;
 VISITING PROFESSOR DESILVA; INSTRUCTORS SATOH AND SIEBER;
 LECTURERS ONUKI, SOIFER, AND WEN

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.

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 adviser. 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 Honors and 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

[§10. **Myth in Indian Art: Krishna and Kali.**]

[§12. **Religion and Literature in Modern South Asia.**]

§17. **Japanese Mythology.** Fall 1991. MR. GILDAY.

A systematic study of the early-eighth-century imperial sacred histories of the Japanese that provide a colorful introduction to the foundations of the Japanese world of meaning. Includes comparisons of various mythic and legendary accounts both from within and outside these official texts, and with patterns and themes typical of myths throughout the world. (Same as **Religion 17.**)

[§20. **Traditional China.**]

(Same as **History 20.**)

[§21. **The Chinese Cultural Revolution.**]

(Same as **History 21.**)

§22. **Chinese Strategy.** Spring 1993. MR. SMITH.

An investigation of traditional strategy, the philosophical and historical contexts from which it arose, and its embodiment in novels from the imperial period. (Same as **History 22.**)

Introductory, Intermediate, and Advanced Courses

§101. **Asian Civilizations.** Fall 1990. MS. DICKEY. Spring 1991. MR. HOLT.

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.

§110. **Introduction to East Asian Art.** Spring 1991. 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 **Art 110.**)

[§120. **Introduction to South Asian Art.**]

(Same as **Art 120.**)

§235. South Asian Cultures and Societies. Fall 1991. 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. The lives of people in this region are explored through ethnographies, novels, and films, as well as in-class simulations of marriage arrangements, religious ritual, and caste ranking. (Same as **Anthropology 235.**)

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

§236. Political Identity and Leadership in South Asia. Spring 1991.

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 and patronage in electoral leadership in several South Asian countries. (Same as **Anthropology 236.**)

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

§237. Relations of Power in India and China. Spring 1992. Ms. DICKEY.

This course focuses on relations of power based on gender and class, making a comparison between India, where gender and class hierarchies are firmly institutionalized, and China, where official attempts have been made since the Revolution to remove class- and gender-based discrimination. The interrelationship of gender and class is examined, as are their influences on and connections with division of labor, religion, and politics. Dominant and subordinate models and types of power are considered throughout the course. (Same as **Anthropology 237.**)

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

§242. Buddhist Thought. Fall 1990. MR. HOLT.

An examination of principal Buddhist categories of religious thought as these arise in representative genres of Buddhist literature, including the Pali *Nikayas* and the *Vinaya* of Theravada tradition and Sanskrit *Sutras* of the Mahayana traditions. (Same as **Religion 222.**)

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

§243. Buddhism, Culture, and Society. Spring 1991. MR. HOLT.

A study of the ways in which Buddhist religious sentiments are expressed aesthetically and politically within the social and cultural histories of India, Sri Lanka, and Burma. Emphasis upon the transformation of Buddhism from a world-renouncing ethic to a foundational ideology of society and culture. (Same as **Religion 223.**)

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

§255. Southeast Asia since World War II. Fall 1990. MR. DESILVA.

The fifty years since the outbreak of World War II have seen the emergence of ten independent states in Southeast Asia. They range in political structure from monarchy, military dictatorship, and communist rule to democracy, and pursue different strategies for economic development. This course compares the evolution of political and economic structures in these countries. (Same as **History 285**.)

§256. South Asian History to the Early Eighteenth Century. Fall 1990.

MR. DESILVA.

A survey of the history of the Indian subcontinent, illustrating the development of a distinctive civilization in the region. While some attention is paid to political history, the primary emphasis of the course is on the evolution of political and social institutions and the analysis of economic change within the region. Its cultural and commercial links with other civilizations are also considered. (Same as **History 286**.)

§257. History of South Asia from the Early Eighteenth Century to 1947. Spring 1991. MR. DESILVA.

A survey of the major political, economic, and social developments in the Indian subcontinent from the fall of the Mughal empire to the end of British rule. Although the main focus is on changes and continuities within South Asia, some attention is paid to factors that fashioned British imperial policy in the region. (Same as **History 287**.)

§258. Ethnicity and Politics in South Asia. Fall 1990. 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**.)

§260. Chinese Poetry in Translation. Spring 1992. MR. HARPER.

A survey of ancient Chinese poetry and poetics, emphasizing the works of the T'ang period writers (including Li Po, Tu Fu, Wang Wei, and Li Ho).

§261. Death and Immortality in Chinese Literature. Fall 1990.

MS. SIEBER.

A study of the concepts and rituals surrounding death in traditional (premodern) China. After exploring philosophical and religious discourses on death and the afterlife, primary attention is given to literary responses to the death of individuals. Readings in translation draw on a number of genres such as poetry, memoirs, eulogies, essays, and drama. The course also examines the interplay between social trends and the literary management of death and immortality.

§265. Religion, Magic, and Science in Ancient China. Fall 1991.

MR. HARPER.

This course studies the interrelationship of religion, magic, and science in early Chinese civilization. Topics include fundamental sym-

bolic systems, Shang and Chou divination, astrology, medicine, alchemy, and Taoist meditation. (Same as **Religion 228.**)

- §270. **Chinese Thought in the Classical Period.** Spring 1993. MR. SMITH.
An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. (Same as **History 270.**)
- §272. **The T'ang.** Fall 1992. MR. SMITH.
The history of China during the T'ang dynasty (609–916). Multidisciplinary investigation of reunification, state-building, and expansion; the rise of schools of Chinese Buddhism; and elite culture, including *shih* poetry. (Same as **History 272.**)
- §274. **Chinese Society in the Ch'ing.** Fall 1993. MR. SMITH.
An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644–1911). Discussion of societal relations and their justifications: state organization, human interaction, ideology. Culminates in a day-long simulation of elite society in the eighteenth century. (Same as **History 274.**)
- §275. **Modern Chinese History.** Fall 1990. MR. SMITH.
An introduction to the history of China from 1840 to the present. Studies the confrontation with Western imperialism, the fall of the empire, the Republican period, and the Peoples' Republic. (Same as **History 275.**)
- §278. **The Foundations of Tokugawa Japan.** Spring 1994. 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, the Confucian challenges to Buddhism, and the unanticipated growth of a quasi-autonomous urban culture. (Same as **History 278.**)
- §283. **Classical Japanese Literature in Translation.** Fall 1990. MS. SATOH.
Extensive and intensive readings in classical Japanese poetry and prose. Designed to call attention to the intrinsic value of individual works, rather than to literary history. Readings and lectures conducted in English.
- §284. **The Modern Japanese Novel in Translation.** Spring 1991.
MS. SATOH.
A critical study of selected Japanese novels of the modern period, with emphasis on the twentieth century. Readings in English translation include selections from the experimental novels of the Meiji period to the avant-garde writings of the postwar years. Readings and lectures conducted in English.
- §285. **Japanese Religion and Culture I.** Fall 1991. MR. GILDAY.
Paradigmatic themes and problems addressed in classical literary, religious, and historical texts of the premodern period. Various ritual,

theatrical, and artistic expressions provide a "textual" context for discussion. (Same as **Religion 224.**)

§286. Japanese Religion and Culture II. Spring 1992. MR. GILDAY.

An introduction to the major trajectories of Japanese religion and culture from the sixteenth to the twentieth century, with particular attention to problems of continuity, change, and interpretation during the modern era. (Same as **Religion 225.**)

[**§287. Pure Land Buddhism in East Asia.**]

§350. Ethnicity, Separatism, and Violence in Twentieth-Century Asia.

Spring 1991. MR. DESILVA.

The rise of ethnic and separatist movements in South and Southeast Asia and the use of violence and terrorism by these movements in pursuit of their objectives have been key features in twentieth-century Asian history. The causes of the emergence of such movements, factors contributing to their relative success or failure, and the consequences of their success or failure are studied through the detailed examination of a few selected movements. (Same as **History 380.**)

§370. Problems in Chinese History. Every fall. MR. SMITH.

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

[**§390. Exoticism and the East: Encounters with Holy Others.**]

(Same as **Religion 303.**)

290. Intermediate Independent Study.

400, 401. Advanced Independent Study and Honors.

Language Courses

Chinese 101. 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 102. Beginning Chinese II. Every spring. MS. WEN.

A continuation of **Chinese 101.**

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

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

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

A continuation of **Chinese 203.**

Chinese 307. Introduction to Classical Chinese I. Every fall. MS. SIEBER.

An introduction to the classical language, with an emphasis on precise translation of texts.

- Chinese 308. Introduction to Classical Chinese II.** Every spring.
MS. SIEBER.
A continuation of **Chinese 307**.
- Japanese 101. Beginning Japanese I.** Every fall. MS. ONUKI.
An introduction to standard modern Japanese. Five hours per week,
plus assigned language laboratory.
- Japanese 102. Beginning Japanese II.** Every spring. MS. ONUKI.
Continuation of **Japanese 101**.
- Japanese 203. Intermediate Japanese I.** Every fall. MS. ONUKI.
A continuation of **Japanese 102**. Five hours per week, plus assigned
language laboratory.
- Japanese 204. Intermediate Japanese II.** Every spring. MS. ONUKI.
A continuation of **Japanese 203**.
- Japanese 205. Intermediate Japanese III.** Every fall. MS. SATOH.
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 206. Intermediate Japanese IV.** Every spring. MS. SATOH.
A continuation of **Japanese 205**.
- Sanskrit 101. Introductory Sanskrit I.** Fall 1990. MS. SOIFER.
An introduction to the structure and content of Sanskrit language,
including basic grammar, vocabulary, and Devanagari script, with pri-
mary emphasis placed on developing translation skills.
- Sanskrit 102. Introductory Sanskrit II.** Spring 1991. MS. SOIFER.
A continuation of **Sanskrit 101**.

Biochemistry

Administered by the Committee on Biochemistry

PROFESSOR PAGE, *Chair of Committee*; PROFESSOR HOWLAND;
ASSOCIATE PROFESSORS SETTLEMIRE AND STEINHART

Requirements for the Major in Biochemistry: All majors must complete the following courses: **Biology 101, Biology (Chemistry) 261, 262; Chemistry 101 and 102, or 109, and 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 113, 114, 116, 201, 202, 204, 302, 304, 400; Chemistry 210, 240, 252, 270, 330, 400; Physics 223, 227, 228, 260, 400.** In addition, majors must complete one of the following: **Biology 212, 213, or 215.** Students may include as electives up to two 400 courses. Finally, a student intending to carry out a laboratory independent study course in biochemistry should first take

Biology 212, 213, or 215. Students taking independent study courses for the biochemistry major should register for **Biochemistry 401, 402**, etc.

Biology

ASSOCIATE PROFESSOR DICKINSON, *Chair*; PROFESSOR HOWLAND;
ASSOCIATE PROFESSOR STEINHART; ASSISTANT PROFESSORS JOHNSON, KENT,
PHILLIPS, AND WHEELWRIGHT; RESEARCH ASSOCIATE PEUSNER; LABORATORY
INSTRUCTORS BLUMBERG, BRYER, SAWYER, AND WINE;

Joint Appointment with Chemistry: ASSOCIATE PROFESSOR SETTLEMIRE

Requirements for the Major in Biology: The major consists of seven semester courses in the department exclusive of courses in the 400 series. Majors are required to complete five core courses, including **Biology 101** and **102** and three of the following: **Biology 113, 114, 115, and 116**. Majors are also required to complete two other courses within the department, one of which must be either a 200-level course with a laboratory or a 300-level course. In addition, majors must complete **Mathematics 161, Physics 103, and Chemistry 225**. Students are advised to complete **Biology 101** and **102** and the mathematics, physics, and chemistry courses by the end of the sophomore year. Students planning postgraduate education in science or in 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 114 and 205.

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.

[51. **The History of Science.**]

[52. **Horticulture.**]

101. **Introductory Cell Biology.** Every fall. THE DEPARTMENT.

Examination of fundamental biological phenomena, with special reference to cells. Topics include ultrastructure, growth and metabolism, cell division and molecular genetics, early development, immunology, membrane transport, and the interaction between viruses and host cells. Lectures and three hours of laboratory work per week. Understanding of high school chemistry is assumed.

102. **Biology of Organisms and Populations.** Every spring.

THE DEPARTMENT.

A study of the properties of organisms and populations, with evolution as a central, unifying theme. Topics include the origin of life; the mechanisms of evolution; a survey of the kingdoms of living organisms; the physiology, morphology, and development of animals and plants; and the effects of the environment on populations. Lectures and three hours of laboratory work per week.

Prerequisite: **Biology 101**.

113. Genetics. Every fall. 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, and the determination of gene order and sequence, and genetic engineering technology and applications. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 213** and **215**.

Prerequisite: **Biology 102**.

114. 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**.

115. 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 population size and distribution. Laboratory sessions, field trips, and group research projects emphasize the natural history of local plants and animals (both marine and terrestrial) and their interactions. One weekend field trip included.

Prerequisite: **Biology 102** or consent of the instructor.

116. Developmental Biology. Every spring. 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**.

[151. **Ethology.**][152. **Biology of Plants.**]**154. Ornithology.** Spring 1991. MR. WHEELWRIGHT.

A study of all areas of the biology of birds, including anatomy, physiology, distribution, and classification, with an emphasis on avian ecology and evolution. Through integrated laboratory sessions, field trips, and an independent research project, students learn identification of birds, functional morphology, and research techniques such as experimental design, behavioral observation, and banding.

Prerequisites: **Biology 102** and/or **115**, or consent of the instructor.

156. Marine Ecology. Fall 1990. 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 consent of the instructor.

160. Invertebrate Zoology. Spring 1991. Ms. JOHNSON.

Comparative morphology and biology of invertebrates, with emphasis on field and laboratory studies of marine invertebrates. Representatives of all major and most minor phyla are collected, observed alive, and studied in some detail. Topics include anatomy, distribution, and classification of invertebrates, with emphasis on morphological and phylogenetic relationships between groups. Lectures and four hours of laboratory work per week. Several one-day field trips and one three-day field trip required (may fall during spring break due to constraints of tides).

Prerequisite: **Biology 102**.

163. Biology of Marine Organisms. Fall 1991. Ms. JOHNSON.

The study of the biology of the marine environment, including oceanographic processes, marine ecosystems, and the natural history of marine plants and animals. Laboratory sessions, field trips, and group research projects emphasize the natural history and functional morphology of local marine plants and animals, and their interactions with each other and with their physical environment. Students read original journal articles and participate in discussions. Lectures and three hours of laboratory work per week. One weekend field trip included.

Prerequisite: **Biology 102**.

201. Microbiology. Fall 1991. 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. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 213** and **215**.

Prerequisites: **Biology 102** and **Chemistry 225**.

202. Immunology. Fall 1990. MR. KENT.

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. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212**.

Prerequisite: **Biology 102**.

203. Comparative Neurobiology. Fall 1990. 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**. **Biology 114** is recommended.

205. Biomechanics. Fall 1990. Ms. JOHNSON.

This course uses an experimental, theoretical, and field approach to examine the quantitative and qualitative characterization of organismal morphology, and to explore the relationship of morphology to measurable components of an organism's mechanical, hydrodynamic, and ecological environment. Lectures, laboratory work, and field trips emphasize the following areas: (1) analysis of morphology, including the statistical analysis of the shape of whole groups of organisms, the quantitative and qualitative description of the shape of individual organisms, and the analysis of the mechanical and molecular organization of tissues; (2) quantitative and qualitative characterization of micro- and macro-scale water movement; and (3) quantitative and qualitative analyses of the ecological and mechanical consequences to organisms of their interaction with their environment.

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

206. Cell Physiology. Spring 1991. MR. KENT.

A study of the structural organization and function of eucaryotic cells, including a general overview of cellular and subcellular organelle anatomy, morphology, and molecular organization. The course considers the processes involved in gene expression, and its regulation, the subsequent transport, sorting, and targeting of proteins to intra- and extra-cellular compartments, as well as cellular specializations and the regulation of cell function by external chemical signals.

Prerequisite: **Biology 102**.

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

Experiments employing contemporary techniques in molecular biology and biochemistry. Emphasis placed 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 113, 201, 261, or 262.**

213. Laboratory in Microbiology, Cell Biology, and Immunology.

Fall 1991. MR. SETTLEMIRE.

Lectures and laboratories to include culture and experimental investigation of the properties of procaryotic and eucaryotic cells. Techniques to be used include tissue culture; light, fluorescence, and electron microscopy; cytometric assays of cell properties; and several immunochemistry principles, including immunoelectrophoresis and enzyme-linked assays. One to two hours of lecture and three to six hours of laboratory per week. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in laboratory courses. This course is a logical precursor to independent study in cellular and molecular biology.

Prerequisites: Previous or concurrent enrollment in **Biology 113, 116, 201, or 202.**

215. Laboratory in Molecular and Cellular Genetics. Fall 1990.

MR. STEINHART.

Lectures and experiments focusing on the concepts and techniques of contemporary molecular and cellular genetics. Techniques to be used include cytogenetic analysis, production and selection of mutant cells, genetic transformation, analysis of gene transcription and translation, and genetic engineering. Methods include cell culture, microscopy, radioisotope labeling, and electrophoresis. One to two hours of lecture and three to six hours of laboratory per week. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in the laboratory courses. This course is a logical precursor to independent study in the areas of cellular and molecular biology.

Prerequisites: Previous or concurrent enrollment in **Biology 113, 116, 201, or 202.**

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

Proteins and enzymes. An introduction to the chemistry and biology of small biological molecules, macromolecules, and membranes. Emphasis is placed upon kinetics and mechanisms of enzymic reactions and upon equilibrium and non-equilibrium thermodynamics underlying biological processes. (Same as **Chemistry 261.**)

Prerequisite: **Chemistry 226.**

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

(See **Chemistry 262**, page 124.)

- 302. Virology.** Spring 1992. MR. STEINHART.
A study of plant and animal viruses, beginning with lectures on fundamental virology and followed by student-led seminars based on the primary literature. The course covers taxonomy, structure, replication, pathogenesis, and epidemiological aspects of viruses.
Prerequisite: **Biology 113** or **201**.
- 303. Advanced Developmental Biology.** Fall 1990. 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** and consent of the instructor.
- 304. Topics in Biochemistry and Molecular Biology.** Spring 1991.
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.
- 305. Neuroethology.** Fall 1991. 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, 203, or Psychobiology 265**, or permission of the instructor.
- 306. Advanced Molecular Genetics.** Spring 1991. MR. STEINHART.
A course 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. Some representative experiments are performed. Three hours of lecture per week and occasional laboratory sessions.
Prerequisite: **Biology 113**.
- 308. Biochemical Endocrinology.** Spring 1992. 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. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212**.

Prerequisite: **Biology 261**.

400. Independent Study and Honors. THE DEPARTMENT.

Chemistry

PROFESSOR BUTCHER, *Chair*; PROFESSORS CHRISTENSEN, MAYO, AND PAGE; ADJUNCT PROFESSORS GILFILLAN AND YENTSCH; ASSOCIATE PROFESSOR NAGLE; ASSISTANT PROFESSORS PRODNUK, STEMMLER, AND TRUMPER; DIRECTOR OF LABORATORIES FOSTER; LABORATORY INSTRUCTORS BARTLETT, BERNIER, DECASTER, AND FICKETT; *Joint Appointment with Biology*: ASSOCIATE PROFESSOR 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 101, 102, 210, 225, 226, 240, 251, 252, 254**, and any two courses at the 300 level or above. Students with strong high school backgrounds can begin with **Chemistry 109** instead of the two-semester **Chemistry 101, 102** sequence. 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 that of a chemistry professional, study of other fields of science, medicine, secondary school teaching, and many areas of the business world. Advanced electives in chemistry, 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 Major: The department participates in interdisciplinary programs in biochemistry, chemical physics, and geology and chemistry. See pages 189–91.

Requirements for the Minor in Chemistry: The minor consists of five chemistry courses appropriate to the major, including **Chemistry 101** and **102**, or **Chemistry 109**.

50. Topics in Chemistry. Spring 1990. **Problems in Atmospheric Science.** MR. BUTCHER.

An examination of contemporary global atmospheric problems. The course begins by considering how scientists observe and construct models about the earth. Some basic principles are introduced and applied to such topics as acid rain, stratospheric ozone, and the greenhouse effect. The course presumes no background in science and is not open to students who have had a college-level science course.

101. Introductory Chemistry. Every fall. MESSRS. CHRISTENSEN, NAGLE, AND PRODNUK.

An introduction to chemistry, including chemical stoichiometry, the properties of gases, atomic and molecular structure, and the periodic properties of the elements. Lectures, conferences, and four hours of laboratory work per week.

102. Introductory Chemistry. Every spring. MS. STEMMLER.

Topics include the properties of solids, liquids, and solutions, ionic and nonionic equilibria, acid base equilibria, elementary thermodynamics, chemical kinetics, oxidation-reduction, and electrochemistry. Lectures, conferences, and four hours of laboratory work per week.

Prerequisite: **Chemistry 101** or consent of the instructor.

109. Advanced General Chemistry. Every fall. MR. BUTCHER.

This course is designed for students with strong backgrounds in secondary school chemistry. Equilibrium properties of gases, liquids, and solutions; the first and second laws of thermodynamics; oxidation-reduction reactions; and the rates of chemical reactions. A placement exam, the high school record, and consultation with the department will guide the student in selecting this course or the 101-102 sequence. Lectures, conferences, and three hours of laboratory work per week.

210. Quantitative Analysis. Fall 1990. 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 chroma-

tography and the statistical analysis of data are addressed. Lectures and four hours of laboratory work per week.

Prerequisite: **Chemistry 102** or **109**.

225. Elementary Organic Chemistry. Every fall. MR. MAYO.

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

Prerequisite: **Chemistry 102** or **109**.

226. Organic Chemistry. Every spring. 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**.

[230–239. Intermediate Topics in Chemistry.]

240. Inorganic Chemistry. Spring 1991. MR. NAGLE.

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. Coverage of topics in bioinorganic and environmental inorganic chemistry is included. A foundation for further work in inorganic chemistry and biochemistry. Lectures and four hours of laboratory work per week.

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

251. 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. Macroscopic behavior of chemical systems is related to molecular properties by means of the kinetic theory of gases and statistical mechanics. Also included is the study of chemical kinetics.

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

252. 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 consent of the instructor. **Mathematics 181** recommended.

- 254. Physical Chemistry Laboratory.** Every spring. MESSRS. CHRISTENSEN AND PRODNUK.
Experiments on thermodynamics, kinetics, and spectroscopy. One to two hours of lecture and three to six hours of laboratory work per week.
Prerequisite: **Chemistry 251, 252** (generally taken concurrently).
- 261. Biochemistry I.** Every fall. MR. HOWLAND.
(See **Biology 261**, page 119.)
- 262. Biochemistry II.** Every spring. MR. PAGE.
An introduction to metabolism. Topics include pathways in living cells by which important biological molecules are synthesized, and the bioorganic chemistry of nucleic acid and protein synthesis. (Same as **Biology 262**.)
Prerequisite: **Chemistry 261**.
- [**270. Molecular Structure Determination in Organic Chemistry.**]
- 310. Instrumental Analysis.** Fall 1990. 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 consent of the instructor.
- [**320. Advanced Organic Chemistry.**]
- 330-339. Advanced Topics in Chemistry.**
- 330. Bioorganic Chemistry.** Fall 1990. 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 **252**, or consent of the instructor.
- [**331. Atmospheric Chemistry.**]
- [**333. Chemical Ecology.**]
- [**335. Topics in Physical Chemistry.**]
- 340. Advanced Inorganic Chemistry.** Spring 1991. MR. NAGLE.
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 included.
Prerequisites: **Chemistry 240** and **252** (the latter may be taken concurrently).

[350. Photochemistry: Light, Chemistry, and Life.]

290. **Intermediate Independent Study.** THE DEPARTMENT.

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

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

Classics

ASSOCIATE PROFESSOR BOYD, *Chair*; PROFESSOR AMBROSE; ASSISTANT PROFESSOR SMITH; INSTRUCTORS HALL AND HIGGINBOTHAM

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 nine courses. At least six of the nine 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. **Classics 51** and **52** may not normally 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. **Classics 51** and **52** may not normally be counted toward the major.

Interdisciplinary Major: The department participates in an interdisciplinary program in archaeology and art history. See page 190.

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**; or **History 202**;
 - and two of the following: **Archaeology 202** 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 elsewhere: 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 p. 91). 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.

First-year Seminars in Classics

12. **Family and *Familia* in Classical Rome.** Fall 1990. MS. BOYD.

An exploration of the Roman concept of the family, with readings selected from both primary sources in translation (literary, historical, and documentary) and modern social-historical studies of the subject. Topics to be covered include the ancient definition of *familia*, and its legal and social implications; types and nature of marriage and divorce; *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, in social and historical context.

Emphasis is placed on the development of critical and analytical thinking and the acquisition of writing skills. No background in classics is required.

Archaeology

Archaeology 101 and 102 are offered in alternate years:

101. **Introduction to Classical Archaeology.** Fall 1991. 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.**)

102. **Introduction to Classical Archaeology.** Fall 1990.

MR. HIGGINBOTHAM.

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.**)

At least one of the following 200-level courses will be offered each year:

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

(Same as **Classics 201.**)

[202. Rome of the Caesars.]

(Same as **Classics 202.**)

[203. Greek Religion.]

(Same as **Classics 203.**)

204. **Pompeii: Everyday Life in A.D. 79.** Spring 1992. MR. SMITH.

The archaeological record of Pompeii and the neighboring towns of the Bay of Naples is unique in the range and completeness of its testimony about domestic, economic, religious, social, and political life in the first century A.D. This course examines archaeological, literary, and documentary material ranging from architecture and sculpture to wall painting, graffiti, and the floral remains of Pompeian gardens, but focuses on interpreting the archaeological record for insight into the everyday life of Pompeii. (Same as **Classics 204.**)

No prerequisites, but not open to students who have taken **Archaeology 310.**

207. **Palaces, Politics, and Art: Bas-reliefs in the Palace of Assurnasir-pal II of Assyria.** Fall 1990. MS. PORTER.

An examination of the interaction of religion, politics, and architectural art in ancient Assyria. A close study of original Assyrian bas-reliefs in the Bowdoin College Museum of Art and of the palace from which they came leads to further investigation of Assyrian culture and society and of the roles of religion and art in ancient political life. Study of the reliefs is supplemented by readings in historical and religious inscriptions from Assyria, archaeological reports, and modern critical essays. (Same as **History 207** and **Religion 207.**)

209. **Pagans and Christians: Art and Society in Late Antiquity.**

Spring 1991. MR. HIGGINBOTHAM.

This course surveys a time of dramatic change during the waning days of imperial Rome. During a period from the beginning of the third century A.D. to the mid-sixth century, classical civilization was forever transformed. This course explores the cultural artifacts of this frequently neglected era, and considers what these remains can tell us about the rise of Christianity, the persistence of pagan cult and ritual, and the political and social changes that led to the creation of a radically different world. (Same as **Classics 209.**)

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

[301. Greek Painting and Mosaic.]

[302. Greek and Roman Numismatics.]

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

307. **The Birth of Greek Art.** Spring 1992. MR. SMITH.

This course examines the art of archaic Greece (seventh and sixth centuries B.C.), and considers the qualities characteristic of archaic Greek culture. Primary emphasis is placed on the archaeological evidence from a variety of media: architecture, sculpture, and vase painting. Literary and historical sources provide a broader cultural context. (Same as **Art 211.**)

309. **Temples, Shrines, and Holy Places: Religious Sanctuaries of Ancient Greece.** Fall 1990. MR. HIGGINBOTHAM.

This course surveys the archaeological remains of the religious sanctuaries of ancient Greece and traces their development from the emergence of Greece from the Dark Ages in the eighth century B.C. to the Roman conquest. Architecture and artifacts are examined with a mind toward understanding cult practice and the religious institutions of ancient Greece. Particular attention is paid to the regional sanctuaries of Delphi, Delos, and Olympia, to what these sites can reveal about the growth of pan-Hellenism, and to how their development was affected by historical events.

310. **Cities of Vesuvius.** Spring 1991. MR. HIGGINBOTHAM.

This course examines the physical remains of the Roman cities buried by the eruption of Mt. Vesuvius in A.D. 79. Material is drawn from the art and architecture of Pompeii, Herculaneum, Stabiae, and other sites around the Bay of Naples. A primary focus is the urban development of these sites as a reflection of Roman social history.

Classics

51. **Classical Mythology.** Fall 1991. MS. BOYD.

Focuses on the mythology of the Greeks and the use of myth in classical literature. Other topics considered are recurrent patterns and motifs in Greek myths; a cross-cultural study of ancient creation myths; the relation of mythology to religion; women's roles in myth; and the application of modern anthropological, sociological, and psychological theories to classical myth. Concludes with an examination of Ovid's use of classical mythology in the *Metamorphoses*.

52. **Greek Literature in Translation.** Spring 1991. 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.

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

(Same as **Archaeology 201.**)

- [202. **Rome of the Caesars.**] (Same as **Archaeology 202.**)
- [203. **Greek Religion.**] (Same as **Archaeology 203.**)
204. **Pompeii: Everyday Life in A.D. 79.** Spring 1992. MR. SMITH.
(Same as **Archaeology 204.**)
208. **Religions of the Greco-Roman World.** Spring 1991. MR. BERGREN.
A study of major religious movements that flourished in the Mediterranean world during the Greco-Roman period, 300 B.C. to A.D. 300, including "pagan" (non-Jewish, non-Christian) religious trends (e.g., mystery religions), Judaism, and Gnosticism. (The Christianity of this period is covered in **Religion 201.**) Emphasis is placed on the interactive diversity among various modes of religious expression. (Same as **Religion 208.**)
Prerequisite: **Religion 101** or **103**, or consent of the instructor.
209. **Pagans and Christians: Art and Society in Late Antiquity.** Spring 1991. MR. HIGGINBOTHAM.
(Same as **Archaeology 209.**)
- [311. **Women in Antiquity.**]

Greek

101. **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.
102. **Continuation of Course 101.** Every spring. MR. AMBROSE.
In the latter half of the term, a work of historical or philosophical prose is read.
203. **Plato.** Every fall. MR. HALL.
204. **Homer.** Every spring. MR. HALL.

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

- [301. **Homer: The *Odyssey*.**]
- [302. **Lyric and Elegiac Poetry.**]
- [303. **The Historians.**]
304. **Comedy.** Spring 1992. MR. AMBROSE.
305. **Tragedy.** Fall 1990. MR. AMBROSE.
This course focuses on the works of Aeschylus, Sophocles, or Euripides, and may be repeated for credit with the contents changed.

306. **Plato and Aristotle.** Fall 1991. MR. AMBROSE.
 [307. **The Orators.**]
 308. **The Alexandrian Age.** Spring 1991. MS. BOYD.

Latin

101. **Elementary Latin.** Every fall. MS. BOYD.
 A thorough presentation of the elements of Latin grammar. Emphasis is placed on achieving a reading proficiency.
102. **Continuation of Course 101.** Every spring. MR. HIGGINBOTHAM.
 In the latter half of the term, readings are based on unaltered passages of classical Latin.
203. **Cicero.** Every fall. MR. HALL.
 A rapid review of grammar followed by readings from Cicero and a brief introduction to Latin poetry.
 Prerequisite: **Latin 101** or two years of secondary school Latin.
204. **Studies in Latin Literature.** Every spring. MS. BOYD.
 This course is intended as 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 of the course 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.
205. **Horace and Catullus.** Every fall. MR. AMBROSE.
 Prerequisite: **Latin 204** or equivalent.
- One of the following advanced Latin courses will be offered each semester:
301. **The Historians.** Spring 1992. MS. BOYD.
 This course focuses on the works of Livy or Tacitus, and may be repeated for credit with the contents changed.
- [302. **Ovid: The *Metamorphoses*.**]
 303. **Elegiac Poetry.** Fall 1991. MS. BOYD.
 [304. **Cicero and Roman Oratory.**]
 305. **Virgil: The *Aeneid*.** Fall 1990. MS. BOYD.
 [306. **The Roman Novel.**]
 [307. **Satire.**]
 [308. **Roman Comedy.**]
 391, 392. **Special Topics.**
 Seneca and the Age of Nero. Spring 1991. MR. HALL.

Independent Study in Greek, Latin, Archaeology, and Classics

290. **Intermediate Independent Study.** THE DEPARTMENT.

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

Computer Science

PROFESSOR TUCKER, *Chair*; ASSISTANT PROFESSORS GARNICK AND RAMSHAW

Computer science, in general, is the study of algorithmic problem solving, computers, their potential, and their limits. In particular, it is the study of algorithms and data structures, including their formal properties, their implementations on real and abstract machines, their programming languages, and their applications in other disciplines and society at large. Computer science is a scientific discipline, in the sense that many of its courses are accompanied by experimental laboratory activities. Students use the laboratories not only to develop programs but also to test hypotheses about the properties of algorithms, data structures, and computers. Computer science is also a mathematical discipline, sharing significant subject matter, methods, and notations with mathematics.

The computer science curriculum is designed to introduce students to the discipline at various levels, and to expose its interdisciplinary ties in the sciences and humanities. Students normally begin by taking an introductory computer science course (50 or 101). The former is a terminal course, while the latter is preferred by students who desire a more intensive introduction to the discipline or are planning to major or minor in computer science.

Students can explore the discipline in greater depth by majoring or minoring in computer science or choosing an interdisciplinary major in computer science and mathematics. These options provide a foundation for graduate study in computer science or a related field, or for other computer-related professional careers.

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 190.

Students who are interested in a student-designed major that combines

computer science with another, related discipline are encouraged to discuss their ideas in detail with the department.

Independent Study, Honors, and Student/Faculty Projects: Advanced students are encouraged to consider taking an independent study course (**Computer Science 290 or 400**), which sometimes can be done in collaboration with an ongoing faculty research project. Independent study projects in disciplines that strongly overlap with computer science are also encouraged.

50. Computer Literacy. Spring 1991. MR. RAMSHAW.

An introduction to principles of programming, computer organization, and applications for students from all disciplines, drawing on examples of computing in the sciences, the social sciences, and the humanities. Additional readings explore various contemporary topics surrounding the use of computers in modern society. Students are expected to complete a term project, appropriate to their principal field of study, that involves either programming, using a software package, or writing a paper that addresses a contemporary issue in computing.

101. Introduction to Computer Science I. Every semester.

THE DEPARTMENT.

A first course in computer science. Emphasis is placed upon logic, problem specification and algorithm design, disciplined style and documentation, recursion, procedural abstraction, and computer organization. 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.

102. Introduction to Computer Science II. Spring 1991. MR. TUCKER.

An introduction to principles of data abstraction, complexity of algorithms, and verification of algorithms, which are central subjects in the field of computer science. Particular data types include lists, stacks, queues, strings, binary trees, and files. Linked lists, arrays, and other implementation strategies are evaluated. Laboratory experiments complement the lectures, and team projects are assigned.

Prerequisite: **Computer Science 101.**

220. Computer Organization. Fall 1990. MR. GARNICK.

Computer systems are organized as multiple layers. Each layer provides a more sophisticated abstraction than the layer upon which it is built. At the top layer, application programs such as word processors define mappings from commands to responses. At the bottom layer, the mappings are implemented as changes in voltages. This course examines techniques and issues involved in designing systems at the digital logic, microprogramming, and assembly language layers of computer organization. Laboratory work is designed to familiarize students with a particular machine through assembly-language programming.

Prerequisite: **Computer Science 101.**

231. Algorithms. Spring 1991. MR. GARNICK.

The study of algorithms concerns programming for computational expediency. This 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.

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

250. Principles of Programming Languages. Fall 1990. MR. TUCKER.

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.

Prerequisites: **Computer Science 102** and **220**, or consent of the instructor.

289. Theory of Computation. Fall 1990. MR. RAMSHAW.

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 consent of the instructor.

290. Intermediate Independent Study. THE DEPARTMENT.**[300. Topics.]****310. Operating Systems.** Every other spring. Spring 1992.

THE DEPARTMENT.

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**, or consent of the instructor.

335. Parallel Computing. Spring 1991. MR. GARNICK.

This course examines ways in which computers and languages can provide services in parallel and coordinate the use of network resources. Topics include the design and analysis of parallel algorithms, interconnection networks, language-level primitives for distributed computing, and parallel algorithms in sorting and scientific applications.

Prerequisites: **Computer Science 220** and **231**, or consent of the instructor.

[360. Compiler Construction.]

365. Formal Methods and Software Systems Seminar. Spring 1991.

MR. TUCKER.

This seminar provides readings, lectures, and case studies in the use of formal methods in the design and evaluation of computer software. Topics include proof of correctness, comparison of software design methods, research in automatic programming, and contemporary software patent protection and intellectual property issues.

Prerequisites: **Computer Science 220** and **231**, or consent of the instructor.

[370. Artificial Intelligence.]**375. Natural Language Processing.** Fall 1990. MR. RAMSHAW.

An exploration of the theoretical connections between linguistics and computer science and of the issues that arise in designing computer systems that understand, generate, or translate natural language texts. Various computational models for the syntax of natural languages are considered, including augmented transition networks and unification grammars. At the level of semantics, the focus is on how to represent word meanings and then combine them into sentence meanings, including related issues in knowledge representation. Finally, pragmatics describes how models for linguistic structures larger than one sentence can be combined with world knowledge about the situation to interpret sentences in context.

Prerequisite: **Computer Science 250** or consent of the instructor.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Economics

ASSOCIATE PROFESSOR GOLDSTEIN, *Chair*; PROFESSORS FREEMAN AND VAIL;
RESEARCH PROFESSOR SHIPMAN; ASSOCIATE PROFESSORS FITZGERALD
AND JONES; ASSISTANT PROFESSORS CONNELLY, DECOSTER,
JOHNSTON, AND MALONEY

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.

The major consists of **Economics 101** and **102**, three core courses (**Econom-**

ics 255, 256, and 257), one advanced topics course numbered in the 300s, and two additional courses in economics numbered 200 or above. (Beginning with the class of 1992, a second 300-level course will be required.) **Economics 101** is a prerequisite for **Economics 102**, and both are prerequisites for most other economics 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.

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 191.

Requirements for the Minor in Economics: The minor consists of **Economics 101 and 102; 255 or 256;** and any two additional courses numbered 200 or above.

[10. **First-year Seminar: Poverty and Discrimination.**]

101. **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. It is 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.**

102. **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.**

207. **The International Economy.** Fall 1990. 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.**

208. American Economic History and Development. Spring 1991.

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 consent of the instructor.

209. Financial Markets. Spring 1991. MR. DECOSTER.

Introduction to the domestic financial system. Topics include the functions, structure, and operation of debt and equity markets; interest rate determination; portfolio theory and the capital asset pricing model; the efficient markets hypothesis; the structure and functions of the financial services industry; bank management; and the nature and effects of financial regulation.

Prerequisites: **Economics 101 and 102.**

210. Economics of the Public Sector. Fall 1991. MR. FITZGERALD.

The economic role of government. Deals with theoretical and policy issues of government expenditures and revenues in meeting such social goals as allocative efficiency and income redistribution. Issues on the current political agenda are given special attention.

Prerequisites: **Economics 101 and 102.**

[211. **Urban Economics.**]

212. Labor and Human Resource Economics. Fall 1991. MR. MALONEY.

Theories of labor market structure and performance, including human resources policies. Topics are covered from an institutional as well as an analytical point of view.

Prerequisite: **Economics 101.**

214. Comparative Political Economy. Spring 1992. MR. VAIL.

The course begins with an investigation of criteria for defining and evaluating the performance of different modes of production. A historical and class analytic framework for comparative study is set out. The core of the course consists of studies of alternative paths to socialism, including the Soviet Union, China, Hungary, and Yugoslavia. Current economic reforms are stressed. Concludes with a study of Sweden's "middle way."

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

[216. **Industrial Organization.**]

217. The Economics of Population. Fall 1990. Ms. CONNELLY.

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, and the second half focuses on the consequences of population growth for the economy.

Prerequisite: **Economics 101.**

218. Economics of Resources and Environmental Quality. Fall 1990.

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.**

§219. Underdevelopment and Strategies for Development in Poor Countries. Spring 1991. MR. VAIL.

The major economic features of underdevelopment are investigated, with stress on economic dualism and the interrelated problems of poverty, inequality, urban bias, and unemployment. The assessment of development strategies emphasizes key policy choices, such as export promotion versus import substitution, agriculture versus industry, plan versus market, and capital versus labor-intensive technologies. Topics include the Third World debt crisis, environmental sustainability, and rapid industrialization in East Asia.

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

[221. Marxian Political Economy.]**[\$222. International Trade and Economic Development.]****255. Microeconomics.** Fall 1990 and spring 1991. MR. JONES.

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. Enrollment limited to 40 students. Elementary calculus will be used.

Prerequisites: **Economics 101 and 102.**

256. Macroeconomics. Fall 1990 and spring 1991. MR. JOHNSTON.

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. Enrollment limited to 40 students. Elementary calculus will be used.

Prerequisites: **Economics 101** and **102**.

257. Economic Statistics. Fall 1990 and spring 1991. MR. GOLDSTEIN.

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. Enrollment limited to 40 students.

Prerequisites: **Economics 101** and **102**.

Courses numbered above 300 are advanced courses in economic analysis intended primarily for senior majors. Enrollment in these courses is limited to 18 students in each unless stated otherwise.

301. The Economics of the Family. Spring 1992. 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 consent of the instructor.

302. Business Cycles. Fall 1990. MR. GOLDSTEIN.

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 consent of the instructor.

308. Advanced International Trade. Spring 1991. MR. JONES.

The study of international trade in goods and capital. Theoretical models are developed to explain the pattern of trade and the gains from trade in competitive and imperfectly competitive world markets. This theory is then applied to issues in commercial policy, such as free trade

versus protection, regional integration, the GATT and trade liberalization, foreign direct investment, LDC debt, and the changing comparative advantage of the United States.

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

309. Monetary Economics and Finance. Spring 1991. 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 consent of the instructor.

310. Advanced Public Economics. Fall 1991. 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 consent of the instructor. Not open to those who have taken **Economics 210**.

312. Advanced Analysis of Labor Market Policies. Fall 1990.

MR. MALONEY.

A survey of labor market issues, such as labor supply, unemployment, discrimination, labor demand, and unionization. A rigorous microeconomic and econometric approach is used. The focus of the course is on public policy analysis—what are the intended and unintended consequences of government policy?

Prerequisites: **Economics 255** and **257**, or consent of the instructor. Not open to those who have taken **Economics 212**.

316. Econometrics. Spring 1991. 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. Enrollment limited to 25 students.

Prerequisites: **Economics 257** or **Mathematics 265**, and **Mathematics 161**, or consent of the instructor.

318. Environmental and Resource Economics. Spring 1992.

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**.

320. Economics, Technology, and Progress. Fall 1991. MR. VAIL.

An investigation of economic and other forces influencing the pace and direction of technical change, as well as the implications of new technology for human well-being and ecological sustainability. Theoretical viewpoints, from Adam Smith to neoclassical "induced innovation," are analyzed, with emphasis on Marxian and institutionalist interpretations. Empirical cases include agricultural mechanization, "scientific management," biotechnology, robotization, and technology transfer to the Third World.

Prerequisites: **Economics 255** and **257**.

329. Open-Economy Macroeconomics. Fall 1991. MR. JONES.

The implications for macroeconomic policy of international linkages through goods and financial markets. Topics include exchange rate determination, balance of payments crises, the measurement of international capital mobility, monetary and fiscal policy impacts in an open economy, international policy coordination, and the history and reform of international monetary institutions. Enrollment limited to 18 students.

Prerequisite: **Economics 256**.

[355. Topics in Advanced Microeconomic Theory.]**400. Independent Study and Honors.** THE DEPARTMENT.

Education

ASSISTANT PROFESSOR MARTIN, *Chair*; MS. PIERSON, *Director of Programs in Teaching and Coordinator of Voluntary Programs*; MR. LIBBY, *Associate in Education*

There is no major in education.

Requirements for the Minor in Education: The minor in education requires four courses, one of which may be an independent study.

Requirements for Certification to Teach in Public Secondary Schools: (1) a major in a teaching field; (2) two courses in psychology; (3) five courses in education (one 100-level course, one 200-level course or an independent study,

and **Education 301, 302, and 303**); and (4) a semester of volunteer experience with youth.

There is a further discussion of careers in teaching on page 93.

101. Education in the Twentieth Century. Fall 1990. Ms. MARTIN.

Beginning with the *Brown* school desegregation decision in 1954, this introductory course examines the past four decades of schooling in America. In addition to enduring themes such as the purpose of schooling and what should be taught, the course traces 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.

[102. **History of American Education.**]

[201. **Schools and Communities.**]

202. Education and Biography. Spring 1991. 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, Larcum, Henry Adams, Cather, McPhee, Sarton, Angelou, and Lightfoot.

250. Law and Education. Fall 1990. MR. ISAACSON.

A study of the intersection of two fundamental American social institutions: the judiciary and the education system. This course examines the impact that the courts have had in influencing the operation and objectives of schools. Issues to be discussed include free speech, student discipline, sex discrimination, race relations, religious objections to curriculum and compulsory education, and teacher rights. Statutory developments in such areas as special education, bilingual instruction, and school financing are also examined.

Prerequisite: Junior or senior standing or consent of the instructor.

301. Teaching. Fall 1990. 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.

Prerequisite: Senior standing, one Bowdoin education course, one psychology course, and consent of the instructor.

302. Student Teaching. Spring 1991. Ms. MARTIN.

This final course in the student teaching sequence demands consider-

able commitment of time and responsibilities in a local secondary school classroom. Required of all students who seek secondary public school certification, it is also open to those with other serious interests in teaching. In addition to daily work in the school, weekly class and conference meetings and writing are required. Grades are awarded on a Credit/Fail basis only. **Education 303** must be taken concurrently with this course.

Prerequisites: Senior standing, **Education 301**, volunteer experience in schools, and consent of the instructor.

303. Curriculum. Spring 1991. Ms. MARTIN.

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 consent of the instructor.

290. Intermediate Independent Study.

400. Advanced Independent Study.

English

ASSOCIATE PROFESSOR LITVAK, *Chair*; PROFESSORS COURSEN, DIEHL, KASTER, AND REDWINE; ASSOCIATE PROFESSORS BURROUGHS, REIZBAUM, AND WATTERSON; ASSISTANT PROFESSORS COLLINGS, GOODRIDGE, AND KIBBIE; INSTRUCTOR SUDAN

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, 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); **61–62** (Creative Writing, only one); **101–103; 240–281; 300–399; 291–292** (independent study); and **401–402** (advanced independent study). **Regular courses (English 50–59) and independent studies (English 296–297; English 406–407) in film and communication do not count toward the major.** Students who intend to major in English should take a minimum of three courses in the department before declaring the major.

Majors who are candidates for honors must write an honors essay and take comprehensive examinations, both oral and written, during the senior year. Exceptions to the major requirements may be arranged by the department to encourage and accommodate special individual programs.

Requirements for the Minor in English and American Literature: At least five of the above courses, excluding all courses in film and communication.

English 10-29**First-year Seminars in English Composition and Literature**

Open to first-year students. The first-year English courses 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 section is normally limited to 15 students and includes discussion, outside reading, frequent papers, and individual conferences on writing problems.

10. Entering Nature. Fall 1990. MR. BURROUGHS.

A survey of attempts to re-encounter, redefine, and regain the natural world. Writers include Emerson, Thoreau, Dillard, Fowles, and Lopez.

11. Reading Women. Fall 1990. MS. DIEHL.

An introduction to issues raised by contemporary feminist literary theory. Authors include Mary Shelley, Charlotte Brontë, Emily Dickinson, Louisa May Alcott, Ellen Glasgow, Virginia Woolf, and Margaret Atwood. In addition, essays are read that pertain to feminist criticism.

12. Modern and Contemporary Fiction. Fall 1990. MS. GOODRIDGE.

This course examines the links and differences between “high modernist” and contemporary writing projects. Readings of short stories and novels by Joyce, Mansfield, Woolf, Elizabeth Bowen, Barbara Pym, Deborah Eisenberg, Laurie Colwin, Kundera, Sontag, and Carver.

13. Gothicism and Sensationalism. Fall 1990. MR. LITVAK.

The Gothic novel, with its lurid depictions of depravity and evil, and the sensation novel, a precursor of detective fiction and of the modern thriller, play a surprisingly central role in late-eighteenth- and nineteenth-century Western culture. We consider that role by reading works by such authors as Denis Diderot, Ann Radcliffe, Matthew Lewis, Mary Shelley, Wilkie Collins, Mary Elizabeth Braddon, Robert Louis Stevenson, Oscar Wilde, and Bram Stoker.

14. Satire. Fall 1990. MR. REDWINE.

An examination of some different methods and objects of satire in works of Sir Thomas More, Shakespeare, Jonson, Voltaire, Swift, Butler, Twain, Huxley, and Orwell.

15. Modern Jewish-American Literature. Fall 1990. MS. REIZBAUM.

The course investigates the category of Jewish-American literature by examining the variety of works designated as such. For example, the course explores the Jewish figure as cultural outsider, and humor as a response to oppression. Authors include Emma Lazarus, Henry Roth, Philip Roth, Grace Paley, Bernard Malamud, Isaac Bashevis Singer, and Cynthia Ozick.

16. **Representation and Gender.** Fall 1990. Ms. SUDAN.

How has "woman" been defined over time? How do these definitions affect representations of women in cultural media? How do feminist writers challenge these definitions in their writing? This course investigates definitions and representations of women in popular culture, using examples from literature, film, advertising, and other texts to examine how past and present forms of culture shape ideologies about women, and how these ideologies affect representations of women. The course also examines feminist responses (both old and new) to prevailing definitions of women, and the sorts of issues raised by their responses. Readings include John Berger's *Ways of Seeing*, Rosalind Coward's *Female Desires*, Marabel Morgan's *The Total Woman*, Simone de Beauvoir's *The Second Sex*, Betty Friedan's *The Feminine Mystique*, and a Harlequin romance. The course also uses writings from magazines, advertising, and a film, and intersperses readings with excerpts from feminist theory.

20. **Theme and Technique in the Twentieth-Century Lyric.**

Spring 1991. MR. BURROUGHS.

The course looks at some of the tensions and accommodations between lyric tradition and historical circumstance in the present century. Poets include Yeats, Frost, Auden, Nemerov.

21. **Twentieth-Century Autobiographical Writing.** Spring 1991.

Ms. GOODRIDGE.

Members of the class read 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, Lowell, Nabokov, Hellman, Benjamin, Barthes, and Sontag.

22. **Literary Revisions.** Spring 1991. Ms. KIBBIE.

This course is organized around pairs of books in which the second work is a reimagining or revision of the first. Equal attention is paid to both the original work and its revision. Works read include *Beowulf/Grendel*, *Hamlet/Rosencrantz and Guildenstern Are Dead*, *Robinson Crusoe/Foe*, *Jane Eyre/The Wide Sargasso Sea*.

23. **Sex, Politics, and the Novel.** Spring 1991. MR. LITVAK.

A look at intersections of gender, race, and sexuality in the novel, with particular emphasis on African-American, feminist, lesbian, and gay male politics. Authors include Harriet Beecher Stowe, George Eliot, Edith Wharton, E. M. Forster, Willa Cather, Nella Larsen, James Baldwin, Gore Vidal, Toni Morrison, and Gloria Naylor.

24. **Drama.** Spring 1991. MR. REDWINE.

Emphasis on the close reading and discussion of plays by Shakespeare, Molière, Ibsen, Shaw, Beckett, and others.

25. **Literature from the "Colonies."** Spring 1991. Ms. REIZBAUM.

The course introduces works in all genres written in English from countries other than England and America, examining the concepts and context of colonization and canonization in relation to these contemporary texts from such countries as Canada (Munro), South Africa (Fugard), Scotland (Lochhead), Ireland (McGahern), Australia, West Indies, Nigeria, and India.

26. **The Politics of Sexuality.** Spring 1991. Ms. SUDAN.

The course examines how sexuality functions as a locus for political debate by exploring the way in which literature, film, and other texts shape our views about sexual norms and behavior. Topics include the place of sexuality in social arrangements such as marriage and the family, sexuality as a basis for defining gender, sexuality as a means of both political resistance and political control, and contemporary debates about abortion, pornography, and homosexuality. Texts include Brontë's *Jane Eyre*, Engel's *The Origin of the Family, Private Property, and the State*, Freud's *Dora*, Kate Chopin's *The Awakening*, Virginia Woolf's *Mrs. Dalloway*, and several films.

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.

101. Every fall. Fall 1990. Ms. KIBBIE.

The course 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.

102. Every spring. Spring 1991. Ms. SUDAN.

This course 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 likely to be considered include Blake, Wordsworth, Coleridge, Shelley, Byron, Keats, Brontë, Tennyson, Arnold, Dickens, Rossetti, Browning(s), Yeats, Eliot, and Woolf.

104. History on Film. Fall 1990. MR. NYHUS.

This course explores topics in Renaissance history as realized visually by important modern directors. In addition to topics such as urban life, the peasant family, the decline of feudalism and the rise of the modern state, witchcraft, and imperialism and the New World, the course considers issues of historiography and the ways in which film as a medium both reinforces ideological assumptions about the past and calls them into question. Films to be screened 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 include primary texts, among them screenplays, narrative history, interpretive history, film criticism, and essays on historiography and methodology. (Same as **History 104**.)

Courses in Writing and Communications

50. Public Speaking. Every fall. Ms. KASTER.

Theory and practice of topic selection, audience analysis, research methods, development and organization of ideas, and delivery techniques. Designed for students with little or no experience in public speaking. Enrollment limited to 20 students.

Prerequisite: Consent of the instructor.

51. History of Film. Every fall. Ms. KASTER.

An examination of the development and growth of film from its pre-filmic origins to the present. Early work of Lumiere, Melies, and Porter is studied, followed by the seminal work of Griffith to establish the language of film with its ability to manipulate space and time. The work of Eisenstein is studied for montage, the work of Renoir for *mise-en-scène*, the work of Welles for manipulation of sound. The films of a variety of *auteur* directors, important film genres, and national film movements are studied, including *auteurs* Fellini, Ford, Truffaut, Bergman, Kurosawa, and Hitchcock; the Western, film noir, and musical genres; and Italian neorealism, the French New Wave, the New German Cinema, the Australian New Wave, the Cinema Novo of Latin America, and the New Japanese Film movements.

52. Electronic Film Production. Every spring. Spring 1990. Ms. KASTER.

The class examines and masters the elements of electronic film production, including screenplay writing and storyboard construction; operation of the video camera, VCR, sound mixer, and lighting kit; and postproduction techniques of electronic editing, multiple-track sound editing, and Chyron computer graphics. The class will be divided into four crews for the production of four films.

Prerequisite: **English 51** and consent of the instructor. Enrollment limited to 20 students.

§53. **The New Latin American Film.** Fall 1991. Ms. KASTER.

An introduction to the major Latin American films from the late 1950s to the present. Emphasis on the films and directors who sought to create a new vision, a new voice, for Latin America by exploring for the first time previously ignored "national realities": marginal urban populations, culturally and economically isolated groups, indigenous communities, repressive dictatorships. Special attention is given to the most important film movements, including the "1960 Generation" in Argentina and the "Cinema Novo" movement in Brazil. Films include those by Argentines Leopoldo Torre Nilsson, Fernando Birri, Fernando Solanas, Luis Puenzo, and Maria Luisa Bemberg; Brazilians Nelson Dos Santos, Glauber Rocha, Hector Babenco, Carlos Diegues, and Leon Hirzman. Additional films from Cuba, Mexico, Uruguay, Chile, and Bolivia. Enrollment limited to 30 students.

60. **English Composition.** Fall 1990. MR. WATTERSON.

Practice in expository and critical writing, with special attention to the preparation, writing, and analysis of student essays. We focus on issues of composition and tone through the examination of American short fiction. Enrollment limited to 15 students.

Prerequisite: Consent of the instructor.

[61. **Creative Writing I.**]

296, 297. **Intermediate Independent Study in Film and Communication.**
Ms. KASTER.

406, 407. **Advanced Independent Study in Film and Communication.**
Ms. KASTER.

Advanced Courses in English and American Literature

200. **Old English.** Every other year. Fall 1991. MR. BURROUGHS.

An introduction to Old English language and literature. Readings in the original, supplemented by materials in translation.

201. **Chaucer.** Every other year. Spring 1992. MR. BURROUGHS.

Emphasis on the *Parliament of Fowls*, *Legend of Good Women*, and *Canterbury Tales*.

202. **Topics in Middle English Literature.** Fall 1990. **Epic and Romance.** MR. BURROUGHS.

The course focuses on the dominant narrative traditions of medieval poetry. Works include *Beowulf*, Chaucer's *Troilus and Criseyde*, *Gawain and the Green Knight*, and Malory's *Morte D'Arthur*. All Middle English works are read in the original.

210A. Shakespeare's Comedies and Romances. Every fall. Fall 1990.

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.

[210B. Shakespeare I.]**211A. Shakespeare II.** Every spring. Spring 1991. MR. COURSEN.

A study of the major tragedies, the Roman plays, and the final comedies. The BBC-TV video productions are screened regularly as a formal component of the course.

211B. Shakespeare's Tragedies and Roman Plays. Every spring.

Spring 1991. 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.

220. English Literature of the Early Renaissance. Every other fall.

Fall 1991. MR. REDWINE.

A critical study of the literature of the sixteenth century, with emphasis upon Elizabethan nondramatic poetry.

221. English Literature of the Late Renaissance. Every other spring.

Spring 1992. 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.

222. Milton. Every other year. Fall 1990. MR. REDWINE.

A critical study of his chief writings in poetry and prose.

230. The Politics of Genre in Restoration and Early-Eighteenth-Century Literature. Every other year. Fall 1991. 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). We consider the emergence of a literary marketplace, and its effect upon ideas of authorship. Writers include Dryden, Gay, Pope, Swift, Richardson, and Fielding.

231. Sublimity and Sentiment in the Eighteenth Century.

Every other year. Spring 1992. MS. KIBBIE.

This overview of the drama, poetry, and prose of eighteenth-century England focuses on the development of two literary movements during this period: the Sublime and the Sentimental. The study of the Sublime

(which revolves around 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 (which focuses on Steele, Lillo, Richardson, and Sterne) necessarily involves discussion of gender and sexuality. Other readings include Johnson, Boswell, Hume, Gibbon, and Goldsmith.

240. Romanticism and Its Other. Every other year. Fall 1990.

MS. SUDAN.

A course designed to explore the polemical and political works of the English Romantic period, read in the context of ongoing politics, national and international (and with special attention to the politics of nationality and gender), of the French Revolution. Writers include Burke, Paine, Blake, Wordsworth, Coleridge, De Quincey, P. B. Shelley, Mary Shelley, Keats, Byron, and Carlyle. Though the chief emphasis is on close interpretation of major dramatic, poetic, and prose texts, the course also explores, through related contemporary representations and interpretations of the Revolution, the practical and theoretical problems encountered when reading literary works in a historical context.

241. Victorian Poetry and Prose. Spring 1991. MR. LITVAK.

Readings in the poetry of Tennyson, Arnold, Elizabeth Barrett and Robert Browning, Christina Rossetti, and Swinburne, and in nonfictional prose by Carlyle, Newman, Mill, Ruskin, Pater, and Wilde.

250. The Rise of the Novel. Every other year. Spring 1991. MS. KIBBIE.

This course 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.

251. The Romantic Novel. Every other year. Fall 1991. MR. COLLINGS.

Readings in novels of the Romantic period. Authors include Godwin, Radcliffe, Edgeworth, Austen, Mary Shelley, Scott, and others.

252. The Victorian Novel. Every other spring. Spring 1992. MR. LITVAK.

The course 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.

260. Twentieth-Century British Poetry. Every other year. Fall 1990.

MS. REIZBAUM.

Authors include Eliot, Auden, Yeats, Hugh MacDiarmid, Stevie Smith, Dylan Thomas, Seamus Heaney, and a further selection from contemporary Scottish and Irish poetry.

261. **Twentieth-Century British Fiction.** Every other year. Spring 1991.
MS. REIZBAUM.
Includes such figures as Stevenson, Joyce, Lawrence, Woolf, Beckett, Lessing, and Jean Rhys.
262. **Modern Drama.** Every other year. Fall 1991. MS. REIZBAUM.
This course focuses on British and American dramas, including the works of Stoppard, Wilde, Ntoke Shange, Beckett, Albee, Wasserstein, and some Continental playwrighting (Brecht, Ibsen).
270. **American Literature to 1860.** Every other year. Fall 1990.
MS. DIEHL.
An overview of American literature from its beginnings to the American Renaissance. This course 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, with the aim of drawing from these differing cultural voices a redefinition of a rich and distinctive emergent American literary culture.
271. **American Literature 1860–1917.** Every other year. Spring 1991.
MS. GOODRIDGE.
This course examines the dominant tensions and ideologies of the mid-to-late-nineteenth century by looking at some tentative connections between the ideologies of slavery and capitalism. Writers include Melville, Hawthorne, Davis, James, Crane, Gilman, and Chopin.
272. **American Fiction 1917–1945.** Every other year. Fall 1991.
MS. GOODRIDGE.
This course 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.
273. **American Fiction since 1945.** Every other year. Spring 1992.
MS. GOODRIDGE.
This course considers fiction from the 1950s, the memoir/autobiography and its relationship to the fictional enterprise, contemporary critiques of Emersonian mythologies, and more recent contemporary fiction. Writers include Nabokov, Cheever, Bowles, McCarthy, Hellman, Kingston, Morrison, Robinson, Eisenberg, Sontag, Carver, McInerney, and DeLillo.
Enrollment limited to 40 students.

274. **American Poetry in the Twentieth Century.** Fall 1991. Ms. DIEHL.
Poets include Frost, Stevens, Williams, Moore, Bishop, Brooks, Lowell, Merrill, Rich, and Plath.
Enrollment limited to 40 students.
- [§275. **African-American Fiction.**]
(Same as **Afro-American Studies 275.**)
- [§276. **African-American Poetry.**]
(Same as **Afro-American Studies 276.**)
280. **Women Writers in English.** Every other year. Spring 1991.
Ms. DIEHL.
A study of traditions of women's writing. Course contents may vary from year to year.
281. **Forms of Narrative.** Fall 1990. MR. LITVAK.
This course examines the role of narrative in a variety of discourses—not only literary but also philosophical, historical, psychoanalytic, and cinematic. Typically, it might consider novels by Jane Austen, Henry James, and Toni Morrison; short stories by Arthur Conan Doyle, Franz Kafka, and Angela Carter; films by Alfred Hitchcock and Orson Welles; a political treatise by Karl Marx; a case history by Sigmund Freud; a Socratic dialogue; and a selection of fairy tales. Readings include examples of the major theories of narrative (Marxist, feminist, structuralist, psychoanalytic, deconstructive, and Foucauldian).
300. **Literary Theory.** Every other year. Fall 1991. MR. LITVAK.
An analysis of semiotic, deconstructive, psychoanalytic, feminist, and Marxist theories of literature.
Prerequisite: Consent of the instructor. Enrollment limited to 15 students.
- 310–350. **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. Enrollment limited to 15 students.
327. **Wallace Stevens and Later American Poetry.** Fall 1990.
Ms. GOODRIDGE.
After considering Stevens's poetry, prose, and selected letters, the course explores his influence on a number of other American poets. Writers include Elizabeth Bishop, James Merrill, John Ashbery, and Vicki Hearne.
Prerequisite: Consent of the instructor. Enrollment limited to 15 students.
328. **Clarissa.** Fall 1990. Ms. KIBBIE.
In recent years, Samuel Richardson's novel has become the focal point for a pitched battle between various theoretical camps (feminist, Marxist,

and deconstructionist). This course considers why *Clarissa* has become such a central text for theorists. The first part of the course provides students with a sense of the context of *Clarissa*: using the novel as a kind of idiosyncratic anthology of Restoration and eighteenth-century literature, students read poems and plays by such diverse writers as Dryden, Pope, Swift, Nicholas Rowe, and Colley Cibber. The second part of the course turns to *Clarissa* itself. Discussions focus on the figure of the rake, the figure of the woman, sentimentality, and the epistolary form.

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

330. "What Resolution From Despair": Faulkner's Major Fiction.

Spring 1991. MR. BURROUGHS.

The course surveys the major Yoknapatawpha fiction, from *The Sound and the Fury* (1929) to *Go Down, Moses* (1942). Emphasis is placed on the circumstances—regional and personal isolation; economic and psychological duress; critical hostility, misperception, and neglect—that are among the contexts and subtexts of a body of work that was almost entirely out of print when it won the Nobel Prize.

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

331. Shakespeare on Film and Television. Spring 1991. MR. COURSEN.

An examination of the Shakespearean script as it emerges on the screen. Plays included are *The Taming of the Shrew*; *A Midsummer Night's Dream*; *Henry V*; *Henry VI, Part II*; *Julius Caesar*; *Hamlet*; *King Lear*; and *Macbeth*.

Prerequisite: **English 210** and **211** and consent of the instructor. Enrollment limited to 15 students.

332. Feminist Literary Theory. Spring 1991. MS. DIEHL.

An examination of major theoretical issues addressed by contemporary feminist critics. Readings are drawn from influential literary, psychoanalytic, and critical texts. Authors include Cixous and Clément, George Eliot, Freud, Gilbert and Gubar, Henry James, Melanie Klein, Clarice Lispector, Elaine Showalter, and others.

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

333. Elizabethan and Stuart Drama. Spring 1991. 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.

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

334. "The Uses of Nostalgia": Studies in the Literary Pastoral.

Spring 1991. MR. WATTERSON.

Readings in Theocritus, Vergil, Longus, Spenser, Shakespeare, Herrick, Milton, Marvell, Wordsworth, Hardy, D. H. Lawrence, Frost, and others. Topics for consideration include the myth of the Golden Age, Eden and the Fall, displacement of sensibility, and the dialectic of town and country, the nature of primitivism, and the paradoxical mediation of nature by art. Attention is also given to the theory and practice of pastoral scholarship over the last fifty years, with readings in Empson, Lévi-Strauss, Poggioli, Toliver, Williams, Montrose, and others.

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

290. Intermediate Independent Study. THE DEPARTMENT.**400. Advanced Independent Study and Honors.** THE DEPARTMENT.

Environmental Studies

Administered by the Committee on Environmental Studies

ASSISTANT PROFESSOR LAINE, *Program Director*; PROFESSOR RENSENBRINK;
ADJUNCT VISITING PROFESSOR DELOGU; ASSISTANT PROFESSOR SIMON;
LECTURER GILFILLAN; Ms. KOULOURIS, *Program Coordinator*

Requirements for the Coordinate Major in Environmental Studies: The major involves the completion of a departmental major (1, *below*) and advanced work related to environmental studies (2).

1. The departmental major requirement may be satisfied by one of the two following approaches: (a) completion of the major requirements in either biochemistry, biology, chemistry, economics, geology, or government: or (b) completion of the major requirements in a department other than those listed above, *provided* that the student's program of studies is approved by the director as to its environmental content.

2. The following environmental studies courses are required:

(a) Six courses related to environmental studies, offered by the program itself or by other departments. Relevant courses in any academic division of the curriculum will be identified by the Environmental Studies Committee on a regular basis. Independent study and some field courses may be included. Relevant courses in other departments that have been identified for the 1990-91 academic year are listed below. Other courses *may* qualify, with prior consultation and approval by the director. Also consult with the director concerning courses offered in previous years that may satisfy the program requirements.

No more than three of these six required courses may be in the area of the student's principal major. Areas of the curriculum are defined as follows:

Sciences: biochemistry, biology, chemistry, geology, mathematics, neuroscience, physics, psychology. *Social Sciences:* economics, government, history, sociology and anthropology. *Arts and Humanities:* art, classics, dance, English, German, music, philosophy, religion, Romance languages, Russian.

(b) Senior course: A culminating course of one semester is required of majors during the senior year. Such courses are multidisciplinary, studying a topic from the perspectives of at least two of the three areas of the curriculum. **Environmental Studies 390** and **391** normally meet this requirement.

[11. Global Environmental Change.]

101. Introduction to Environmental Studies. Every year. Fall 1990.

MR. LAINE.

An examination of how the earth's major environmental systems work and an analysis of the relationship between these systems and such fundamental issues as population growth, resource and energy quality and sufficiency, and environmental quality. Explored in depth are 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. Enrollment limited to 60 students, with preference given to first- and second-year students.

200. Marine Ecology. Fall 1990. 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 consent of the instructor.

220. Environmental Law. Fall 1990. MR. DELOGU.

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.

235. Philosophy of Technology. Spring 1991 and spring 1993.

MR. SIMON.

Modern technology is perhaps the most crucial factor shaping life in this century. Its growth, use and abuse, and our increasing reliance on it raise a number of philosophical issues, including technology as a means for solving human problems and as a form of human expression; its

impact on our relation to nature; views of technology as liberating versus imprisoning; and ethical and political problems raised by control and misuse of various technologies. (Same as **Philosophy 235**.)

- 236. Environmental Analysis: Political Philosophy.** Spring 1992. MR. SIMON.

An examination of environmental issues from the perspective of political philosophy: the tensions between collective responsibilities and individual rights, problems of collective decision-making and the formation of policy, and questions of justice and our responsibilities to others. Problems that may be addressed include energy policy, resource exhaustion, and waste disposal; agricultural policy, food policy, and world hunger; acid rain; the greenhouse effect; population policy; and exploitation of oceanic resources and the pollution of the oceans. (Same as **Philosophy 236**.)

- 241. Principles of Land-Use Planning.** Spring 1992. 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 juniors and seniors to the physical principles of land-use planning and the legal and socioeconomic principles that underlie it.

Prerequisite: Consent of the instructor.

- 258. Environmental Ethics.** Fall 1990. 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. This course examines the ethical theories and assumptions that inform the debates over this issue and in general over how to treat the environment. Specific topics to be covered include utilitarianism versus rights theory, the nature and justification of anthropocentrism, animal liberation and the rights of nonhuman sentient things, preservation of endangered species, the ethics of preserving the wilderness, the moral status of nonsentient living things, holism versus individualism, the land ethic, and attitudes toward land use. (Same as **Philosophy 58**.)

- [**315. Environmental Models for Growth Management.**]

- 335. Regulating Chemicals in the Environment: Scientific, Legal, and Economic Aspects.** Fall 1990. MR. FREEMAN.

A study of the principles of risk assessment and risk management, especially as applied to environmental exposures to chemicals. Regulation of these chemicals to protect human health involves economic and public health trade-offs. The questions to be addressed in this course include How does our government make these trade-offs today? and How should

these trade-offs be made in a society that desires to improve human welfare? Topics to be covered include the scientific basis for assessing health risks, benefit-cost and risk-benefit analysis, the present legal framework for regulation, and alternative approaches to regulation. Case studies include the efforts to reduce children's exposure to lead, control of PCBs and pesticides in food, and control of airborne toxic chemicals.

Prerequisite: Junior or senior standing, and consent of the instructor.

390. Seminar in Environmental Studies. Spring 1991. **Ecology and Democracy.** MR. RENSENBRINK.

Prerequisite: Junior or senior standing, and permission of the instructor. Preference given to environmental studies majors.

391. Seminar in Environmental Studies. Spring 1991. **Global Environmental Change.** MR. LAINE.

An interdisciplinary examination of the earth's climate system and the consequences of natural and artificial changes to the system. A foundation in the principles of climatology is used to explore the geological and historical record of climate changes and their influence on human and nonhuman populations. The potential for human modification of the climate system and the possible ecological and environmental consequences are discussed.

Prerequisite: Senior standing. Enrollment limited to 16 students. Preference given to environmental studies majors.

290. Intermediate Independent Study. THE PROGRAM.

400. Advanced Independent Study and Honors. THE PROGRAM.

CROSS LISTINGS

Sciences

Biology 115. Ecology. Fall 1990. MR. WHEELWRIGHT.

(See **Biology 115**, page 116.)

Prerequisite: **Biology 102** or consent of the instructor.

Chemistry 50. Topics in Chemistry. Spring 1991. **Problems in Atmospheric Science.** MR. BUTCHER.

(See **Chemistry 50**, page 122.)

Geology 17. The Maine Coast: Present, Past, and Future. Fall 1990.

MR. LEA.

(See **Geology 17**, page 160.)

Geology 50. Geology of Ocean Basins and Margins. Fall 1990.

MR. LAINE.

(See **Geology 50**, page 161.)

Geology 101. Introduction to Physical Geology. Fall 1990.

THE DEPARTMENT.

(See **Geology 101**, page 161.)**Geology 102. Introduction to Historical Geology.** Spring 1991.

THE DEPARTMENT.

(See **Geology 102**, page 161.)Prerequisite: **Geology 101** or consent of the instructor.**Geology 121. Arctic Landscapes.** Fall 1991. MR. LEA.(See **Geology 121**, page 161.)

Prerequisite: Consent of the instructor.

Geology 256. Environmental Geology. Fall 1991. MR. LAINE.(See **Geology 256**, page 163.)Prerequisite: **Geology 101** or consent of the instructor.**Social Sciences****§Anthropology 231. Native Peoples and Cultures of Arctic America.**

Spring 1991. MS. KAPLAN.

(See **Anthropology 231**, page 245.)**Sociology 214. Science, Technology, and Society.** Spring 1992. MS. BELL.(See **Sociology 214**, page 241.)Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.**[§Sociology 230. The Populations of Asia.]****Sociology 251. Sociology of Health and Illness.** Fall 1990. MS. BELL.(See **Sociology 251**, page 242.)Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor. Not open to students who have previously taken **Sociology 151**.**Humanities****Art 190. Architectural Design I.** Spring 1991. MR. GLASS.(See **Art 190**, page 106.)

Other courses can be considered for full credit in the Environmental Studies Program with prior approval by the director. It is the student's responsibility to consult with the director and to demonstrate the course's relevance to his or her course of studies. An example of a course that falls into this category is:

Economics 217. Economics of Population. Fall 1990. MS. CONNELLY.(See **Economics 217**, page 138.)

Foreign Language Literature Courses in Translation

Each year the Departments of 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. A list of such courses follows. For detailed course descriptions, consult the departmental listings, pages 108, 125, 164, 228, and 234.

Asian Studies

- §260. **Chinese Poetry in Translation.** Spring 1992. MR. HARPER.
§261. **Death and Immortality in Chinese Literature.** Fall 1990.
Ms. SIEBER.
§283. **Classical Japanese Literature in Translation.** Fall 1990.
Ms. SATOH.
§284. **The Modern Japanese Novel in Translation.** Spring 1991.
Ms. SATOH.

Classics

52. **Greek Literature in Translation.** Spring 1991. MR. AMBROSE.

German

51. **German Literature in English Translation.** Every fall. MR. CERF.
This course may be repeated for credit with contents changed. Enrollment limited to 50 students.

Italian

322. **Italian Literature in Translation.** Spring 1991. Ms. RUGGIERO.

Russian

- §215. **Slavic Civilization.** Every other year. Spring 1991. MR. MILLER.
220. **Nineteenth-Century Russian Literature.** Fall 1990. MR. MILLER.
221. **Twentieth-Century Russian Literature.** Spring 1991. Ms. KNOX.
222. **Topics Course.** Fall 1990. **Women in Russian Society and Culture.** Ms. KNOX.
223. **Dostoevsky and the Novel.** Spring 1991. Ms. KNOX.

Spanish

[322. Modern Spanish-American Literature in English Translation.]

Geology

PROFESSOR HUSSEY, *Chair*; ASSISTANT PROFESSORS LAINE AND LEA

A geology major has been approved beginning with the academic year 1989-90. Students interested in majoring in geology should consult with the chair of the department as soon as possible, preferably in their first year.

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, 256, 262, 265, 270, 278, and 280**. **Geology 101 and 102** should be taken during the first year. **Geology 50 and 121** ordinarily will not count toward the major except as approved individually by the department for exceptional circumstances. Majors are advised to take **Chemistry 101 and 102, Physics 103, and Mathematics 171** by the end of their junior year. These ancillary science courses are generally a requirement for admission to graduate study and for employment in the field of geology. 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.

Interdisciplinary Majors: The department participates in formal interdisciplinary programs in geology and physics and in geology and chemistry. See pages 189-91.

Requirements for the Minor in Geology: The minor consists of two courses chosen from **Geology 50, 101, and 102**, and two courses chosen from **Geology 201, 211, 221, 222, 241, 256, 262, 265, 270, and 280**.

17. **The Maine Coast: Present, Past, and Future.** Fall 1990. MR. LEA.

A first-year seminar on the Maine coast introduces students first-hand to geological field methods and approaches to scientific research. An appreciation of the geological present and past of one of Maine's greatest resources is needed to assess its vulnerability to increasing development and to suggest protective measures. Through several weekend and half-day field trips and classroom work, students collect information to construct a record of sea-level changes over the last 12,000 years, examine modern coastal environments and processes, and assess the impacts of coastal developments. Class projects include brief reports of field studies and an independent paper.

50. Geology of Ocean Basins and Margins. Every fall. MR. LAINE.

The processes of erosion and sedimentation of shoreline and near-shore environments, emphasizing the delicate equilibrium of these environments; the morphology of and physical processes operating in the ocean basins; the origin and evolution of ocean basins in light of recent research in plate tectonics; the paleontologic and climatic record preserved in ocean sediments. Three hours of lecture per week. No previous experience in science courses is assumed.

101. Introduction to Physical Geology. Every semester.

THE DEPARTMENT.

Lectures devoted to 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. A one-day field trip is taken to York County to examine evidence for glaciation, recent sea-level changes, structures and types of metamorphic rocks, and sequence of intrusion of four major magma series. Three lectures and one three-hour laboratory per week. No previous experience in science courses is assumed.

102. Introduction to Historical Geology. Every spring.

THE DEPARTMENT.

The principles involved in the interpretation of geologic history as deciphered from the rock record and a review of present knowledge 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 a summary of the geologic history of the principal tectonic belts of North America. A three-day field trip is taken in the spring to illustrate important aspects of the geologic history of the southern and central coastal Maine area. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Geology 101** or consent of the instructor.

121. Arctic Landscapes. Fall 1991 and fall 1993. MR. LEA.

The unique physical characteristics and ecosystems of arctic regions reflect both modern conditions and the legacy of marked environmental change in the earth's past. This course traces the development of arctic landscapes through time, examines the dynamics of modern arctic environments, and explores the sensitivity of these environments to change. Topics include tectonic evolution of the Arctic, Pleistocene glaciation, oceanographic and sea-level history, geomorphic processes and permafrost, development of the arctic biota, and the role of the Arctic in the global earth system. Three hours of lecture per week.

Prerequisite: One course in natural sciences or consent of the instructor.

- 201. Earth Materials.** Spring 1991 and spring 1993. MR. HUSSEY.

The identification, crystallography, 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 50 or 101, Chemistry 101, or Physics 103.**

- 211. Optical Mineralogy and Crystallography.** Fall 1991 and fall 1993.

MR. HUSSEY.

A study of 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 101, or Geology 101, or Physics 103.**

- 221. Sedimentology.** Fall 1991 and fall 1993. 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 interpretation 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 to observe sedimentary processes.

Prerequisites: **Geology 211** (or concurrent enrollment in **Geology 211**) and **Physics 103.**

- 222. Stratigraphy and Depositional Systems.** Spring 1992 and spring 1994. 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 lab periods and one three-day trip over spring break.

Prerequisite: **Geology 221** or consent of the instructor.

- 241. Structural Geology.** Fall 1990 and fall 1992. MR. HUSSEY.

The primary and secondary structures of rocks, and the interpretation of crustal deformation from these features. Laboratory work includes 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 presentation of data. Three hours of lecture and one three-hour laboratory per week. Frequent field trips during laboratory periods.

Prerequisite: **Geology 101**, or **Geology 50** with consent of the instructor.

256. Environmental Geology. Fall 1991 and 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 consent of the instructor.

262. Petrology. Spring 1992 and spring 1994. MR. HUSSEY.

The classification, description, and genesis of the common 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**.

265. Geophysics. Fall 1990 and fall 1992. MR. LAINE.

An introduction to interpretation methods in geophysics. Topics to be examined 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**.

270. Geomorphology. Fall 1990 and fall 1992. 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 consent of the instructor.

278. Quaternary Environments. Spring 1990 and spring 1992. MR. LEA.

The Quaternary period is a subdivision of geologic time that includes both the present day and the ice ages of the Pleistocene. Hallmarks of the Quaternary include dramatic and cyclic climatic change, the development

of modern landscapes and ecosystems, and the rise of the human species. This course examines methodologies for Quaternary environmental and climatic reconstruction, the geologic record of Quaternary environmental change, and implications of such change for the earth's future. Topics include 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 **121**, or consent of the instructor.

280. Glacial Geology. Spring 1991 and spring 1993. MR. LEA.

Study of glacier processes and the geologic record of past glaciations. Topics include glacier-climate relationships, ice flow, warping of the earth's crust by ice sheets, glacial landforms and depositional environments, methods of relative and numerical dating, glacier reconstruction and paleoclimatic interpretation. Three hours of lecture and one three-hour laboratory/field trip per week.

Prerequisite: **Geology 101** or consent of the instructor.

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

German

PROFESSOR HODGE, *Chair*; PROFESSORS CAFFERTY AND CERF;
ASSISTANT PROFESSOR O'CONNOR; TEACHING FELLOW SCHOTT

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: **German 102** or equivalent, plus any four courses, of which two must be in the language (**203-398**).

11. Law and Literature. Spring 1991. MR. CERF.

An examination of the treatment of law and legal themes in the imaginative writing of Western civilization. The contributions of five historical periods, in particular, are explored: ancient Greece, Elizabethan England, Enlightenment Europe, nineteenth-century North America, and twentieth-century Europe. The following questions are asked:

(1) Why have imaginative writers been attracted to legal issues over thousands of years? (2) How have the democratizing processes in European and American society been reflected in drama and prose fiction

over the centuries? (3) In what ways has the distinction between legality and legalism evolved as a major literary theme? (4) What is the role of minority rights in fiction dealing with the law? Works of the following writers will be considered: Sophocles, Shakespeare, Beaumarchais, Kleist, Melville, Kafka, and Dürrenmatt. All readings are in English.

51. German Literature in English Translation. Every fall.

Enrollment limited to 50 students. This course may be repeated for credit with contents changed.

The Literary Imagination and the Holocaust. Fall 1990.

MR. CERF.

An examination of the literary treatment of the Holocaust, a period between 1933 and 1945, during which 11 million innocent people were systematically murdered by the Nazis. Four different literary genres are examined: the diary and memoir, drama, poetry, and the novel. Three basic sets of questions are raised by the course: (1) How could such slaughter take place in the twentieth century? (2) To what extent is literature capable of evoking this period? What different aspects of the Holocaust are stressed by the different genres? (3) What can our study of the Holocaust teach us with regard to contemporary issues surrounding totalitarianism and racism?

52. Myth and Heroic Epic of Europe. Spring 1993. 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 Mabingonian, 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. In English.

101, 102. Elementary German. Every year. Fall 1990. MS. O'CONNOR.
Spring 1991. MR. CERF.

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.

203, 204. Intermediate German. Every year. Fall 1990. MR. CERF.
Spring 1991. 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.

- 205. Advanced German Language.** Every year. Fall 1990. MR. HODGE.
Designed to increase oral fluency, compositional skills, and understanding of spoken German. Stylistics and idiomatic usages may be emphasized.
Prerequisite: **German 204** or equivalent.
- 308. Introduction to German Literature.** Every year. Spring 1991.
MS. O'CONNOR.
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. The course develops students' sensitivity to literary structures and techniques and introduces terminology for describing and analyzing texts.
- 313. The Development of Literary Classicism.** Fall 1991.
THE DEPARTMENT.
Begins with the reaction against the Age of Reason and continues into the later works of Goethe and Schiller.
Prerequisite: **German 204** or equivalent.
- 314. The Romantic Movement.** Spring 1992. THE DEPARTMENT.
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.
- 315, 316. Literature of the Nineteenth and Twentieth Centuries.**
Fall 1990. MR. HODGE. Spring 1991. MS. O'CONNOR.
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.
- 317. German Literature since 1945.** Fall 1990. MS. O'CONNOR.
Representative postwar authors from East and West Germany, Austria, and Switzerland.
Prerequisite: **German 204** or equivalent.
- 319. The Short Prose Form.** Fall 1991. THE DEPARTMENT.
Unique theory, form, and content of the German Novelle as it has developed from Goethe to the present.
Prerequisite: **German 204** or equivalent.
- 398. Seminar in Aspects of German Literary History.** 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 contents changed.

Prerequisite: **German 204** or equivalent.

East German Literature and Culture in Transition. Spring 1991.
Ms. CAFFERTY.

An examination of the political and cultural development of the GDR. The history of cultural politics (*Kulturpolitik*), the evolution of socialist realism as a guiding doctrine and its demise, the role of the arts and artists in preparing for the revolution of November 1989. The changing role of literature in society. Reinterpretations of themes of revolutionary struggle: Sisyphus, Icarus, Faust, Müntzer, the Spanish Civil War, Aufbau, and "socialist tragedy," individual versus collective. Authors: Seghers, Wolf, Biermann, Braun, Müller, Konigsdorf, Hein, et al.

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Government and Legal Studies

ASSOCIATE PROFESSOR SPRINGER, *Chair*; PROFESSORS MORGAN, POTHOLM, AND YARBROUGH; ASSISTANT PROFESSORS AYUBI, FRANCO, MARTIN, AND WEIGLE; VISITING LECTURER COHEN

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, and 341**), comparative politics (**Government 223, 224, 225, 226, 227, 230, 235, 275, 280, 320, 321, and 362**), political theory (**Government 225, 240, 241, 242, 243, 244, 250, 255, 341, 342, 343, and 344**), international relations (**Government 226, 227, 235, 260, 261, 270, 271, 275, 280, 361, and 362**), and public policy (**Government 202, 203, 204, 210-211, 255, 270, 275, 301, 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. 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

Government 100

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 consent of the instructor.

Fall 1990

[101. Comparative Politics.]

102. 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.

103. The Pursuit of Peace. MR. SPRINGER.

This seminar 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.

105. 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. Topics range from a discussion of civil rights and civil liberties to the rise of the influence of PACs in the electoral and decision-making processes.

106. Aspects of Political Theory. MS. YARBROUGH.

This course introduces students to 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? Through a close reading of Plato, Aristotle, the Bible, Machiavelli, Locke, Marx, and Nietzsche, the course examines the answers to these and other questions.

108. Topics in Political Theory. MR. FRANCO.

An introduction to the basic issues and perspectives in the history of political philosophy. The course will focus on questions relating to the nature of political philosophy, justice, happiness, freedom, authority, and the relationship of the individual to society. The course examines such authors as Plato, Machiavelli, Hobbes, Rousseau, and Nietzsche.

Spring 1991**107. 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.

160. Introduction to International Relations. MR. POTHOLM AND MR. SPRINGER.

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, the international espionage subculture, revolutionary change, and environmental constraints 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 consent 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.

200. Local Governments. Fall 1990. MR. COHEN.

Taught by a practicing public law attorney, this course is designed to explore the most direct and visible form of government for most Americans. Through a case law approach, the sources, scope, and limits of power belonging to local governments are discussed and analyzed. The

relationship of local governments to state and federal government is considered. The effectiveness and future of local governments are explored via readings, case studies, and guest lectures.

201. Law and Society. Spring 1991. 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.

202. The American Presidency. Spring 1991. 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.

[203. Elections, Parties, and Interest Groups in America.]

204. Congress and the Policy Process. Fall 1990. 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.

210. 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 consent of the instructor.

211. 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.**

§223. African Politics. Fall 1990. 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. There is a panel discussion with African students and scholars at the end of the course.

224. West European Politics. Spring 1991. Ms. WEIGLE.

This course provides a broad historical foundation for understanding contemporary politics in that part of Europe which is understood in the parlance of the day as "the West." The bulk of the course focuses on post-World War II political trends in this region, using Great Britain, France, and West Germany as case studies but examining the broader context of domestic and foreign politics in light of changing political orientations, the European Community, the reunification of Germany, and the impact of Gorbachev on the superpower relationship and Eastern Europe.

226. Middle East Politics. Spring 1991. Ms. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect Middle East political processes.

§227. Ethnicity and Politics in South Asia. Fall 1990. Ms. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect the political processes in India, Pakistan, Bangladesh, and Sri Lanka.

230. Soviet Politics. Fall 1990. Ms. WEIGLE.

An introduction to the domestic politics of the U.S.S.R. Examines Soviet society in terms of political, economic, and social development, highlighting the failure of liberalism in Russia, the nature of Stalinist totalitarianism, and the explosive impact of Gorbachev's reforms. Focuses on changing institutions, the revitalization of political processes, the emergence of a civil society, and nationalism, with a view toward analyzing the consequences of Gorbachev's "restructuring" of Soviet society.

[235. Advanced Comparative Government.]**240. Political Theory: Classical Political Philosophy.** Fall 1990.

Ms. YARBROUGH.

This course 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? Why should we be just at all? 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?

241. Modern Political Philosophy. Spring 1991. Ms. YARBROUGH.

Beginning with Machiavelli and Thomas 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.

243. Idealist Theories of the State: Rousseau to Hegel. Fall 1990.

MR. FRANCO.

An examination of the transformation of modern political philosophy—of the social contract tradition and of the tradition of rights-based liberalism—in the political philosophies of Rousseau, Kant, and Hegel. The course focuses on the new understanding of the self and its relation to society that is found in these writers, as well as on their nonempiricist conceptions of freedom and the human will. The appeal to antiquity, the impact of the French Revolution, and the replacement of nature with history as the source of human meaning are themes explored in connection with these writers.

244. Critics of Modernity: Marx, Nietzsche, and Weber. Spring 1991.

MR. FRANCO.

A careful examination of Marx's and Nietzsche's seminal critiques of modernity and of liberal democracy: the one centered on capitalist production and its alienation of humanity's productive powers, the other focused on ascetic ideals and their denial of human creativity and will to power. Consideration of both the similarities and the all-important differences between these two critiques. The course concludes with a consideration of Weber's interpretation of modernity and his debt to both Marx and Nietzsche.

250. American Political Thought. Spring 1991. MS. YARBROUGH.

This course examines the political thought of American statesmen, politicians, writers, and prominent citizens from the colonial period to the twentieth century. It seeks to explore the philosophical foundations upon which republican government in America rests and to examine the connection between theory and practice in American political life. It begins with an investigation of the Puritan heritage, and then examines the nature of American republicanism as it emerged at the Founding. Moving away from the founding period, the course examines Jacksonian democracy, transcendentalism, the crisis of the house divided, the transformation of the American political tradition in the post-Civil War era, and the emergence of welfare state liberalism. The course concludes with a discussion of contemporary thinkers and their place in the American political tradition.

[255. Approaches to Political Science: Quantitative Analysis in Political Science.]

260. International Law. Fall 1990. 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.

270. American Foreign Policy: Its Formulation and the Forces Determining Its Direction. Spring 1991. MR. SPRINGER.

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.

271. Soviet Foreign Policy. Spring 1991. MS. WEIGLE.

An introduction to Soviet foreign policy, from the breakdown of the Russian Empire through the period of Gorbachev's "New Political Thinking." Emphasis on the international context within which Soviet foreign policy activity occurs, in order to demonstrate the significance of Soviet behavior within the field of international relations. The main purpose of the course, however, is to study Soviet motivations for foreign policy activity, stemming from theoretical, ideological, geostrategic, and domestic political concerns. Readings and lectures combine primary Soviet sources and Western analyses in a comprehensive approach to Soviet foreign policy.

[§275. Advanced International Politics: Rich Nations/Poor Nations.]**Level C Courses**

Level C courses provide seniors (and juniors, with the consent 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.

[301. Advanced Seminar in American Politics: Reforming the Intelligence Agencies.]**302. Colloquium in Law and National Security.** Fall 1990.
MR. MORGAN.**304. Advanced Seminar in American Politics: Presidential-Congressional Relations.** Spring 1991. MS. MARTIN.**320. Advanced Seminar in Comparative Politics: Politics and Anti-Politics in East Central Europe.** Fall 1990. MS. WEIGLE.**[341. Advanced Seminar in Political Theory.]****[342. Advanced Seminar in Political Theory.]**

343. **Advanced Seminar in Political Theory: Contemporary Political Philosophy.** Spring 1991. MR. FRANCO.
361. **Advanced Seminar in International Relations: Conflict Simulation and Conflict Resolution.** Spring 1991. MR. POTHOLM.
362. **Advanced Seminar in International Relations and Comparative Government: Terrorism.** Fall 1990. MS. AYUBI.
400. **Advanced Independent Study and Honors.** The Department.

History

PROFESSOR NYHUS, *Chair*; PROFESSOR LEVINE;
 ASSOCIATE PROFESSORS KARL, McMAHON, SMITH, STAKEMAN, AND WELLS;
 ASSISTANT PROFESSORS KILLION, MAY, STEINBERG, AND TANANBAUM;
 VISITING PROFESSOR DE SILVA; LECTURERS HOCHSTETTLER, JERVIS,
 LEWALLEN, AND PORTER

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 adviser.

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 adviser. A student should plan, in consultation with his or her adviser, 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 problems courses is limited to 16 students. Each first-year seminar (**History 10-25**) is limited to 16 students. Other history courses are 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.

Seminar 10. The French Revolution. Spring 1991. MR. KARL.

An intensive examination of the course of the French Revolution, viewed in terms of the historiographical controversy of the past fifteen years. Directed ultimately to the question of whether the present bicentennial celebration of the French Revolution is a meaningful exercise. If so, should it include the Terror? This seminar is not open to students who are concurrently enrolled in **History 212**.

Seminar 11. Women in Britain and America: 1750-1920. Fall 1991.

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.

§Seminar 17. The Cuban Revolution. Fall 1991. 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.

Seminar 18. The Vietnam War. Spring 1992. MR. LEVINE.

An examination of the Vietnam War from the Vietnamese and American viewpoints. Major topics include the nature of Vietnamese society, the impact of French colonialism, the cold war background (domestic and foreign) to American involvement, and the impact of the war on Vietnam and the United States.

[§Seminar 20. Traditional China.]

(Same as **Asian Studies 20**.)

[§Seminar 21. The Chinese Cultural Revolution.]

(Same as **Asian Studies 21**.)

§Seminar 22. Chinese Strategy. Spring 1993. MR. SMITH.

An investigation of traditional strategy, the philosophical and historical contexts from which it arose, and its embodiment in novels from the imperial period. (Same as **Asian Studies 22**.)

Seminar 23. Class Formation in American History. Spring 1991.

MR. STEINBERG.

Perhaps the most important social process of the nineteenth century in the United States and other Western nations was the rise of industrial capitalism and its characteristic social classes. This course examines this process as both an economic and cultural phenomenon, beginning with its roots in the agrarian society of the late eighteenth century. The course concentrates especially on working-class and middle-class formation, attempting to understand how these groups were the product of uniquely nineteenth-century social changes, and how they emerged from both similar and distinct processes of change.

§103. Asian Civilizations. Fall 1991. 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.**)

104. History on Film. Fall 1990. MR. NYHUS.

This course explores topics in Renaissance history as realized visually by important modern directors. In addition to topics such as urban life, the peasant family, the decline of feudalism and the rise of the modern state, witchcraft, and imperialism and the New World, the course considers issues of historiography and the ways in which film as a medium both reinforces ideological assumptions about the past and calls them into question. Films to be screened 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 include primary texts, among them screenplays, narrative history, interpretive history, film criticism, and essays on historiography and methodology. (Same as **English 104.**)

124. Music and Society during the Renaissance. Spring 1992.

MESSRS. GREENLEE AND NYHUS.

This analysis of music and society focuses on the interrelations between music and the church, class structure and social values, and on the differing concepts of the Renaissance in historical and musicological literature. (Same as **Music 125.**)

§131. The Autobiography of African America. Fall 1991. MR. STAKEMAN.

A survey of the history of African Americans as it is revealed through the autobiography, one of the first literary genres developed by African Americans. This course uses the autobiography as a source to examine African American thought and experience. Works to be covered include such classic autobiographies as *Equiano's Travels*, *Narrative of the Life of Frederick Douglass*, Richard Wright's *Black Boy*, and *The Autobiography of Malcolm X*, among others. (Same as **Afro-American Studies 102.**)

§161. The African Diaspora. Fall 1990. MR. STAKEMAN.

The spread of African ideas and people of African descent to the rest of the world from ancient Egypt through the slave trade era, with emphasis on the impact of Africa on classical Greek, Roman, and Byzantine civilizations; the development of classical African civilizations; the dispersal of Africans before and during the slave trade; and the development of African-American societies in the New World. (Same as **Afro-American Studies 101.**)

201. Ancient Greece. Spring 1991. 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.

202. Ancient Rome. Fall 1991. MR. NYHUS.

A survey of the political, social, and economic history of the republic and empire. Extensive selections of Livy, Tacitus, and Suetonius, as well as literary texts.

203. Europe in the Middle Ages, 1050–1300. Spring 1992.

MR. NYHUS.

A survey covering political and social institutions as well as intellectual and cultural movements of twelfth- and thirteenth-century Europe.

206. Florence and Strasbourg during the Renaissance. Spring 1991.

MR. NYHUS.

An analysis of the economic, social, and political structures of two key cities of the Renaissance, together with the culture that made them famous.

207. Palaces, Politics, and Art: Bas-reliefs in the Palace of Assurnasirpal II of Assyria. Fall 1990. MS. PORTER.

An examination of the interaction of religion, politics, and architectural art in ancient Assyria. A close study of original Assyrian bas-reliefs in the Bowdoin College Museum of Art and of the palace from which they came leads to further investigation of Assyrian culture and society and of the roles of religion and art in ancient political life. Study of the reliefs is supplemented by readings in historical and religious inscriptions from Assyria, archaeological reports, and modern critical essays. (Same as **Archaeology 207** and **Religion 207.**)

211. Europe 1517–1715: Reformation to Louis XIV. Spring 1992.

MR. KARL.

The Reformation serves as introduction to the social, political, and intellectual development of continental Europe to the death of Louis XIV.

- 212. Europe 1715–1848: Enlightenment, Revolution, and Napoleon.** Fall 1990. MR. KARL.
A survey of continental European evolution from the beginning of the eighteenth to the mid-nineteenth century, focusing on the role of the French Revolution in that development, and directed toward the problem of European community.
- 214. Europe 1939 to the Present.** Fall 1991. 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.
- 215. Nazi Germany.** Fall 1991. MR. KARL.
After a brief survey of German development, the course considers the rise of National Socialism and concentrates on the character and nature of the Nazi dictatorship.
- 217. History of Russia to 1825.** Spring 1992. 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.
- 218. History of Russia: 1825 to the Present.** Spring 1991. 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.
- [**219. War and Society in Modern Europe 1740–1945.**]
- 222. History of England, 1485–1750.** Fall 1990. MS. TANANBAUM.
A survey of the political, cultural, intellectual, social, and economic history of England from the reign of Henry VII, the first Tudor ruler, to the reign of the Hanoverian king, George II. Topics include the Tudor-Stuart monarchs, the Elizabethan Settlement, the English Civil War, the Restoration, and the Glorious Revolution.
- 223. History of England, 1750–1990.** Spring 1991. 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 industrial revolution, acculturation of the working classes, the impact of liberalism, the reform movement, and Victorian society. The course ends with an analysis of the domestic impact of the world wars and of contemporary society.
- 229. The Growth of the Welfare State in Britain and America: 1834 to the Present.** Spring 1993. MR. LEVINE.
A study in 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.

230. Interpretations of American History. Fall 1991. MR. LEVINE.

Consideration of four or five topics from the American Revolution to the present, all related to social change: how historians have disagreed with each other, the nature of historical inquiry, and the relationship between past and present. Readings include Hartz, *The Liberal Tradition in America*; Lowi, *The End of Liberalism*; Hamilton, *Report of the National Bank*; and Collingwood, *The Idea of History*. Students read different works on the same subject and in class discuss the ways in which the historians agree and disagree with each other, and why. This course is particularly useful for history majors, since there is some explicit concentration on 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.

231. Social History of Colonial America, 1607–1763. Fall 1991.

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.

232. History of the United States, 1824–1877. Fall 1990.

MR. STEINBERG.

Beginning with the emergence of Jacksonian democracy, this course examines the great social changes of the mid-nineteenth century that drew the slave and free states further apart and led to secession and civil war. Using social change as a foundation, the course examines the major political and legal events that led to disunion and shaped the era of Reconstruction and its ambiguous legacy.

233. American Society in the New Nation, 1763–1840. Fall 1990.

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.

239. The Public Sphere in American History. Spring 1991.

MR. STEINBERG.

An examination of the problem of "public" authority in the American national experience, beginning with the Revolutionary era conflicts over state power and continuing into the twentieth. The course considers the development of national, state, and local government; the emergence of political parties; law and the courts; voluntarism; and the continuous debates conducted by Americans about the relative merits of public and private means of accomplishing social tasks and exercising authority.

240. The United States since 1945. Spring 1992. 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.

§242. The Pan-African Idea. Spring 1991. MR. STAKEMAN.

The exchange of political and cultural ideas among African and New World societies in the nineteenth and twentieth centuries, and the various attempts to unite those societies (Pan-Africanism). Topics include the Haitian slave revolt and its effect on slaves in the United States, emigrationism, black missionary efforts, Pan-African congresses, the international aspects of the Harlem Renaissance, Marcus Garvey, black anti-imperialist movements, international aid to African nationalist movements, and Pan-African religions (Rastafarianism, Santeria). (Same as *Afro-American Studies 201*.)

243. The Civil Rights Movement. Fall 1992. MR. LEVINE.

This course 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."

§245. African-American Religion and Its Music: Redemption Songs.

Spring 1992. MR. STAKEMAN.

By focusing on black religious music in the Americas, this course considers how specific historical contexts have shaped and reflected the development of a distinctly Afro-American church, theology, and folk religion. The course examines the different interactions of African and

European cultures which have produced a variety of Afro-American cultures, the social role of the black minister, the social stratification of black Protestant denominations, the social roles within church services, the social welfare functions of churches, and black millenarianism. Topics include slavery and the spiritual, the black peasantry and folk blues, urbanization and gospel music. (Same as *Afro-American Studies 245*.)

246. Women in American History, 1600–1900. Fall 1990.

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.

247. American Women in the Twentieth Century. Every other year.

Spring 1991. Ms. MAY.

This course examines political, social, and economic changes effected by American women and those that have shaped women's lives in this century. Topics include women's expanded political roles, new definitions of femininity and sexuality, and the "revolution" in women's employment.

248. Family and Community in American History. Spring 1993.

Ms. McMAHON.

An examination of 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 neighborhood networks; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life.

[249. *America's Working Women.*]

§250. History of Mexico. Fall 1991. MR. WELLS.

This course traces the historical evolution of the United States' southern neighbor, Mexico. After a brief look at the pre-Hispanic past, Spanish settlement and colonization, and the chaotic nineteenth century, a significant share of the course examines twentieth-century Mexico and its problems and prospects for the future. Among the topics to be explored: U.S.-Mexican relations, immigration and other "border" problems, the debt crisis, the oil syndrome, the future of the PRI in Mexico, and the impact of revolutionary movements in Central America on Mexico.

§252. Colonial Latin America. Fall 1990. MR. WELLS.

Most modern writers refer to a "traditional society" in Latin America that has proved remarkably resistant to innovation and social change. This course provides an in-depth analysis of the formative stages of this traditional society. Tracing the development of the new culture brought about by the fusion of European, Indian, and African elements, the course provides a better understanding of the rich and diverse heritage of Latin America. Topics to be discussed: 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.

§255. Modern Latin America. Spring 1991. MR. WELLS.

An important segment of this course 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.

§256. Comparative Slavery. Fall 1992. MR. WELLS.

This survey 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. The topics to be discussed 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.

§258. Latin American Revolutions. Spring 1992. MR. WELLS.

This course examines revolutionary change in Latin America from a historical perspective. It concentrates 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 1991. MS. TANANBAUM.

This course offers a historical overview of the Middle East during the nineteenth and twentieth centuries. The course focuses on the disintegra-

tion 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*, the Palestinian uprising.

§261. African Kingdoms. Fall 1990. MR. KILLION.

An introduction to African political and economic development prior to large-scale European penetration of the continent. The principal focus is the relationship between economic growth and social organization in the Sudanic belt, Ethiopia, and Southern Africa before 1800. Topics include the growth of long-distance trade, the origins and structure of divine kingship, the expansion of slavery and serfdom, and the impact of Islam. Readings emphasize original African sources where possible.

§262. Africa and the Slave Trade: 1500–1850. Spring 1991.

MR. KILLION.

The roots of contemporary African economic dependency often are traced to the impact of the Atlantic slave trade during the period from 1500 to 1850. This course focuses on the slave trade from an African perspective, exploring the relationship between the trade and economic and political change in all parts of Africa.

§263. Nationalism in Africa: From Resistance to Nation-Building.

Spring 1991. MR. KILLION.

African nationalism lies at the heart of the political history of contemporary Africa. To a large extent, African nationalism developed in opposition to European colonialism, yet contemporary African states have inherited the political structure of colonialism. This course examines the development of nationalism in Africa, from early anticolonial resistance movements, through the intellectual blossoming of Pan-Africanism, to the contradiction-laden independence of former colonial states whose boundaries enclose competing ethnic and religious groups.

§266. The African Poor. Fall 1990. MR. KILLION.

An exploration of the social impact of poverty and oppression in colonial and postcolonial Africa, with emphasis on the relationship between economic dislocation and new forms of social organization in both rural and urban settings. Topics include workers' organizations and strikes; women's oppression and struggles for emancipation; the social dimensions of the ecological crisis; peasants' dislocation by capitalist agriculture; urban immigration and new social organizations; and revolutionary movements mobilizing the rural poor. Readings are assigned primarily from African novels.

§270. Chinese Thought in the Classical Period. Spring 1993. MR. SMITH.

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

§272. **The T'ang.** Fall 1992. MR. SMITH.

History of China during the T'ang dynasty (609–916). Multidisciplinary investigation of reunification, state-building, and expansion; the rise of schools of Chinese Buddhism; and elite culture, including *shih* poetry. (Same as **Asian Studies 272.**)

§274. **Chinese Society in the Ch'ing.** Fall 1993. MR. SMITH.

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

§275. **Modern China.** Fall 1990. MR. SMITH.

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

§278. **The Foundations of Tokugawa Japan.** Spring 1994. 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.**)

§285. **Southeast Asia since World War II.** Fall 1990. MR. DESILVA.

The fifty years since the outbreak of World War II have seen the emergence of ten independent states in Southeast Asia. They range in political structure from monarchy, military dictatorship, and communist rule to democracy, and pursue different strategies for economic development. This course compares the evolution of political and economic structures in these countries. (Same as **Asian Studies 255.**)

§286. **South Asian History to the Early Eighteenth Century.** Fall 1990. MR. DESILVA.

A survey of the history of the Indian subcontinent, illustrating the development of a distinctive civilization in the region. While some attention is paid to political history, the primary emphasis of the course is on the evolution of political and social institutions and the analysis of economic change within the region. Its cultural and commercial links with other civilizations are also considered. (Same as **Asian Studies 256.**)

§287. **History of South Asia from the Early Eighteenth Century to 1947.** Spring 1991. MR. DESILVA.

A survey of the major political, economic, and social developments in the Indian subcontinent from the fall of the Mughal empire to the end of British rule. Although the main focus is on changes and continuities

within South Asia, some attention is paid to factors that fashioned British imperial policy in the region. (Same as **Asian Studies 257**.)

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. Majors in fields other than history are encouraged to consider these seminars.

Problems in Early European History.

300. The Social History of the Reformation. Fall 1990. 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.

310. The Stalin Era. Fall 1991. MR. KARL.

Investigates the Stalinist dictatorship from its formation in the 1920s to its apogee and demise after World War II. Preference given to seniors and juniors, in that order.

311. Nazi Germany. Fall 1990. MR. KARL.

A research seminar, with a major research project and paper. Preference given to seniors; thereafter, to juniors with **History 215** or equivalent.

Problems in British History.

321. The Victorian Age. Fall 1990. MS. TANANBAUM.

An interdisciplinary study of the Victorian era in England. The course explores the changing political milieu, issues of industrial progress and poverty, the status of men and women in domains such as home, work, health, education, and philanthropy. This course emphasizes critical reading of primary and secondary sources, discussion, and research methods.

Problems in American History.**330. Reform Movements in American History.** Fall 1990.

MR. STEINBERG.

An examination of the history of reform and radical movements in the United States, from the American Revolution through the 1960s. The course identifies traditions, differences, common problems, and dilemmas faced by reformers throughout American history through readings and discussion about the labor movement, abolitionism, feminism, benevolent moral reform, progressivism, populism, socialism, civil rights, and student radicalism.

331. A History of Women's Voices in America. Spring 1992.

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 consent of the instructor.

332. Community in America, 1600-1900. Spring 1991.

MS. MCMAHON.

An examination of the ideals of community in American history, and the social, economic, and cultural realities of community experience, searching for both change and continuity from the seventeenth through the nineteenth centuries. The course examines the formation of new communities on a frontier that begins along the Atlantic seaboard and then moves westward across the continent; the attempts to create alternative communities either separate from, or contained within, established communities; and the changing face of community that accompanied expansion, urbanization, and suburbanization.

333. Radicalism in Twentieth-Century America. Fall 1991. Mr. Levine.

Starts with the "Lyrical Left" before World War I, but concentrates on the left between the wars, the fate of that left, and the growth of a "New Left." Topics include the Communist Party, various sorts of socialism, the "New York Intellectuals," the "Non-Stalinist Left," and the shifting views of many radicals from criticism to support of the United States in the 1940s and 1950s. The growth of a new sort of radicalism during the civil rights movement and the anti-Vietnam War movement is also considered.

334. Research in Twentieth-Century Afro-American History.

Fall 1992. MR. LEVINE.

Bowdoin has recently acquired extensive source collections on this subject: papers of the Congress of Racial Equality of the Student Non-

Violent Co-ordinating Committee, White House Central Files of Civil Rights during the Kennedy and Johnson administrations, F.B.I. surveillance records, and much more. This seminar involves research centering on this material.

Prerequisite: Any course in twentieth-century U.S. history. Preference will be given to students with previous background in Afro-American history. (Same as **Afro-American Studies 334.**)

§335. The Afro-American Critique of America. Fall 1991.

MR. STAKEMAN.

Afro-Americans have had to confront American racism for three centuries. Their perceptions of America, the "Negro problem," and strategies for the improvement of black life have spanned the radical/liberal/conservative political spectrum. This course asks students to read and analyze the writings of black intellectual activists including black abolitionists (Frederick Douglass), black progressives (Booker T. Washington, W. E. B. Du Bois, Marcus Garvey), literary activists (James Weldon Johnson, Langston Hughes, Zora Neale Hurston), civil rights-era activists (Martin Luther King, Malcolm X, the Black Panther Party), and post-civil rights theorists (Manning Marable and Thomas Sowell).

Problems in Latin American History.

§350. Economic Theory and the Problem of Underdevelopment in Latin America. Fall 1990. 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.**

§351. The Mexican Revolution. Spring 1991. MR. WELLS.

An examination of the Mexican Revolution (1910–20) 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.**

§352. Land and Labor in Latin America. Spring 1992. MR. WELLS.

This seminar 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 Asian History.**§370. Problems in Chinese History.** Every fall. MR. SMITH.

This course reviews the whole of Chinese history. Students develop their research skills and write a substantial research paper. (Same as **Asian Studies 370.**)

§380. Ethnicity, Separatism, and Violence in Twentieth-Century Asia.

Spring 1991. MR. DESILVA.

The rise of ethnic and separatist movements in South and Southeast Asia and the use of violence and terrorism by these movements in pursuit of their objectives have been key features in twentieth-century Asian history. The causes of the emergence of such movements, factors contributing to their relative success or failure, and the consequences of their success or failure are studied through the detailed examination of a few selected movements. (Same as **Asian Studies 350.**)

290. Intermediate Independent Study. THE DEPARTMENT.**400. Advanced Independent Study.** THE DEPARTMENT.**451, 452. Honors Seminar.** Every year. THE DEPARTMENT.

Interdisciplinary Courses

Interdisciplinary courses, such as the two examples below, offer students an opportunity to consider topics of interest to several departments from their disciplinary perspectives. Inquiries about the relation of these courses to a major program should be addressed to the appropriate department.

[Afro-American Studies 51. Myth and Heroic Epic of Africa.]**German 52. Myth and Heroic Epic of Europe.** Spring 1991. MR. HODGE.

(See page 165.)

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, 290** (Independent Study in Ancient History); **History 201 or 202**; **Philosophy 111**; or **Religion 240**.
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 adviser from each department.

Chemical Physics

Requirements:

1. **Chemistry 101, 102, or 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, 332, 335, 340, 350, 401, 402**; **Physics 223, 229, 310, 320, 350, 451, 452**. At least two of these must be below the 400 level.
4. A working knowledge of computer language; this may be satisfied by **Computer Science 101, Mathematics 244**, or a demonstrated competence.

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 101 and 102, or Chemistry 109**.
2. Four courses from the following: **Chemistry 210, 225, 226, 240, 251, and approved advanced courses**.
3. **Geology 101, 102, and 201**.
4. Three courses from the following: **Geology 211, 221, 222, 241, 256, 262, 265, 278, and 280**.
5. **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 101, 102; 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 either Mathematics 223, 224, 263, or 269**.
2. Six courses in economics as follows: **Economics 101, 102, 255, 256, 316, and one other 300-level course**.

Latin American Studies

Coordinated by the Committee on Latin American Studies

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 recom-

mended 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.

The **minor in Latin American studies** 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

English

- §53. **The New Latin American Film.** Fall 1991. MS. KASTER
(See **English 53**, page 148.)

Government and Legal Studies

102. **Caribbean Forms.** Fall 1990. MR. POTHOLM.
(See **Government 102**, page 168.)

History

- §17. **The Cuban Revolution (First-year Seminar).** Fall 1991.
MR. WELLS.
(See **History 17**, page 176.)
- §250. **The History of Mexico.** Fall 1991. MR. WELLS.
(See **History 250**, page 182.)
- §252. **Colonial Latin America.** Fall 1990. MR. WELLS.
(See **History 252**, page 183.)
- §255. **Modern Latin America.** Spring 1991. MR. WELLS.
(See **History 255**, page 183.)
- §258. **Latin American Revolutions.** Spring 1992. MR. WELLS.
(See **History 258**, page 183.)
- §350. **Economic Theory and the Problem of Underdevelopment in Latin America.** Fall 1990. MR. WELLS.
(See **History 350**, page 188.)

- §351. **The Mexican Revolution.** Spring 1991. MR. WELLS.
(See **History 351**, page 188.)
- §352. **Land and Labor in Latin America.** Spring 1992. MR. WELLS.
(See **History 352**, page 188.)

Spanish

205. **Advanced Spoken and Written Spanish.** Every fall. MR. TURNER.
(See **Spanish 205**, page 233.)
313. **Spanish-American Literature before the Twentieth Century.**
Fall 1990. MS. JAFFE.
(See **Spanish 313**, page 234.)
314. **Modern Spanish-American Literature.** Spring 1992. MS. JAFFE.
(See **Spanish 314**, page 234.)
320. **Topics in Spanish and Hispanic-American Literature I:
Latin American Poetry from Modernism Through Vanguardism.**
Fall 1990. MR. THOMPSON.
(See **Spanish 320**, page 234.)
321. **Topics in Spanish and Hispanic-American Literature II:
Political Commitment and the Latin American Writer.**
Spring 1991. MR. TURNER.
(See **Spanish 321**, page 234.)

Mathematics

PROFESSOR JOHNSON, *Chair*; PROFESSORS BARKER, GROBE, AND WARD;
ASSOCIATE PROFESSOR FISK; ASSISTANT PROFESSORS GHOREISHI, JAFARI,
OHRING, ONG, ROBERTS, AND 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 major program to the department at the time that he or she declares a major. That program should include courses in which the emphasis is primarily theoretical and courses in which applications are stressed. A student's major program may be changed later with the approval of the departmental adviser.

All majors should take basic courses in algebra (e.g., **Mathematics 222** or **262**) and in analysis (e.g., **Mathematics 223** or **263**). The department also encourages all majors 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. Such a substitution must be approved in advance by the department.

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, in exceptional cases, 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.

Interdisciplinary Majors: The department participates in interdisciplinary programs in mathematics and economics and in computer science and mathematics. See pages 189-91.

Listed below are some of the courses recommended to students contemplating various options in mathematics.

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.**

50. Topics in Mathematics. Every spring. THE DEPARTMENT.

This course is designed for students who wish to learn something about the spirit of modern mathematics and who do not plan to take other mathematics courses. The emphasis is 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.

60. Introduction to College Mathematics. Every fall. MRS. ROBERTS.

Material selected from the following topics: combinatorics, probability, modern algebra, logic, linear programming, and computer program-

ming. This course, followed by **Mathematics 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.

75. **An Introduction to Statistics and Data Analysis.** Every other spring. Spring 1990. 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**).

161. **Differential and Integral Calculus I.** Every semester.

THE DEPARTMENT.

An introduction to limits; the derivatives of rational functions and trigonometric functions; rules for differentiation; applications of differentiation to rates of change; curve sketching; extremal problems and linear motion; introduction to integration and integration by substitution; the Fundamental Theorem of Calculus; and applications of integration to the calculation of areas and volumes.

Mathematics 161 may be taken as either a lecture or a self-paced course in the fall semester, but only as a self-paced course in the spring semester. Open to students whose secondary school background has included at least three years of mathematics.

171. **Differential and Integral Calculus II.** Every semester.

THE DEPARTMENT.

The natural logarithm and exponential functions; an introduction to first-order differential equations; the inverse trigonometric functions; techniques of integration and numerical integration; improper integrals and l'Hôpital's Rule; infinite sequences and series; convergence tests; power series and Taylor series. **Mathematics 171** may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 161** or equivalent.

172. **Differential and Integral Calculus II, Advanced Section.**

Every fall. MR. GROBE.

Improper integrals and l'Hôpital's Rule; infinite sequences and series; convergence tests; power series and Taylor series; complex numbers; separable differential equations; first- and second-order constant coefficient linear differential equations; and applications.

Open to students whose background includes the equivalent of **Mathematics 161** and the first half of **Mathematics 171**.

181. Multivariate Calculus with Linear Algebra. Every semester.

THE DEPARTMENT.

Multivariate calculus in two and three dimensions, and an introduction to linear algebra. The calculus topics include vector geometry and the calculus of curves; differentiation; the partial derivatives of real-valued functions, the gradient, directional derivatives, approximations using the tangent plane, and applications to extremal problems; and multiple integration in two and three dimensions. The linear algebra topics include Gaussian elimination, matrix algebra, and an introduction to vector spaces with an emphasis on \mathbb{R}^n . Applications from the physical and the social sciences are discussed as time permits. **Mathematics 181** may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 171** or equivalent.

205. Applied Multivariate Statistics. Every other fall. Fall 1991.

MR. FISK.

An introduction to the techniques of applied multivariate analysis based on matrix algebra and the multivariate normal distribution. Techniques to be discussed may include discriminant analysis, principal components, factor analysis, canonical correlations, multidimensional scaling, classification trees, and graphic techniques. These techniques are useful in many disciplines such as biology, psychology, and sociology. Students learn how to run and interpret the output from SPSS, BMDP, S, and other statistical packages.

Prerequisites: **Mathematics 181** and a college-level statistics course.

222. Linear Algebra. Every year in alternate semesters. Fall 1990.

MR. GROBE.

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, Fourier series, and cryptography.

Prerequisite: **Mathematics 181** or consent of the instructor.

223. Vector Calculus. Every year in alternate semesters. Spring 1991.

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**.

- 224. Applied Mathematics I.** Every year in alternate semesters. Spring 1991.

An introduction to the theory of ordinary differential equations with diverse applications to problems arising in the natural and social sciences. Emphasis is placed upon 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**.

- 225. 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**.

- 228. 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 and relations, graphs, and program correctness.

Prerequisite: **Mathematics 161** or consent of the instructor.

- 231. Data Structures and Algorithms.** Every spring. MR. GARNICK.

The study of data structures concerns programming for conceptual expediency; the study of algorithms concerns programming for computational expediency. This course covers techniques in these two areas and examines their interplay. Topics include abstract data types, dynamic list structures, trees, graphs, sorting, dynamic programming, NP-completeness, and parallel algorithms. (Same as **Computer Science 231**.)

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

- 242. Number Theory.** Every other fall. Fall 1990. MR. WARD.

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.

243. Functions of a Complex Variable. Every other fall. Fall 1991.

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 181** or consent of the instructor.

244. Numerical Analysis. Every year in alternate semesters. Fall 1990.

An introduction to the numerical solutions of mathematical problems. Topics include computational aspects of linear algebra, approximation theory, numerical differentiation and integration, and numerical methods for differential equations. Students are required to develop PASCAL programs for the topics covered; additional instructional time is scheduled each week for computer laboratory demonstrations and experiments.

Prerequisites: **Mathematics 181** or **222**, and experience with PASCAL programming.

247. Geometry. Every other fall. Fall 1991. MR. FISK.

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 consent of the instructor.

249. Linear Programming and Optimization. Every other fall. Fall 1990. MR. JOHNSON.

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. The emphasis is on convex and linear programming methods, but other nonlinear optimization techniques are presented. The course includes computer demonstrations of many of the techniques that are discussed.

Prerequisite: **Mathematics 181**.

262. Introduction to Algebraic Structures. Every year in alternate semesters. Spring 1991. 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 consent of the instructor.

263. Introduction to Analysis. Every year in alternate semesters.

Fall 1990. MR. JAFARI.

This course 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**.

264. Applied Mathematics II. Every other spring. Spring 1992.

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 emphasis on stability of equilibria, perturbation theory, chaos theory, and a few numerical methods. Knowledge of a programming language is helpful.

Prerequisite: **Mathematics 224**.

265. 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, exponential models, frequency data, and analysis of normal measurements.

Prerequisites: **Mathematics 181** and **225**.

269. Seminar in Operations Research and Mathematical Models.

Every other spring. Spring 1991. MR. JOHNSON.

Selected topics in operations research and some of the mathematical models used in economics. Emphasis on probabilistic models and stochastic processes, with applications to decision analysis, inventory theory, forecasting, and queueing theory.

Prerequisites: **Mathematics 225** and **249**, or consent of the instructor.

286. Topology. Every other spring. Spring 1991.

An introduction to both point-set and geometric topology centered on the fundamental notion of topological space and continuous function. Topics include fundamentals of point-set topology, with special emphasis on homeomorphisms, compactness, connectedness, and separation. Geometric applications include fixed point theorems, surfaces, covering spaces, the Jordan curve theorem, and an introduction to knots and links.

Prerequisite: **Mathematics 263** or consent of the instructor.

287. **Advanced Topics in Geometry.** Every other spring. Spring 1992.
MR. FISK.
One or more selected topics from classical geometry, projective geometry, algebraic geometry, or differential geometry.
Prerequisite: **Mathematics 247.**
288. **Combinatorics and Graph Theory.** Every other spring.
Spring 1991.
An introduction to combinatorics and graph theory. Topics to be covered may include enumeration, matching theory, generating functions, and partially ordered sets. Applications cover Latin squares, designs, computer science, and graph algorithms.
Prerequisite: **Mathematics 171.**
289. **Theory of Computation.** Every fall. Fall 1990. MR. RAMSHAW.
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 consent of the instructor.
302. **Advanced Topics in Algebra.** Every other spring. Spring 1992.
MR. JOHNSON.
One or more specialized topics from abstract algebra and its applications.
Prerequisite: **Mathematics 262.**
303. **Advanced Topics in Analysis.** Every other spring. Spring 1991.
MR. BARKER.
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.**
304. **Advanced Topics in Applied Mathematics.** Every other fall.
Fall 1990.
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.**
305. **Advanced Topics in Probability and Statistics.** Every other fall.
Fall 1990. MS. SHARPE.
One or more specialized topics in probability and statistics. Possible topics include applied 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**.

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Music

ASSOCIATE PROFESSOR GREENLEE, *Chair*; PROFESSOR SCHWARTZ;
ASSISTANT PROFESSORS GIRDHAM, McCALLA, AND SMITH

Requirements for the Major in Music: **Music 101** or exemption, **102, 103, 201, 202; 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: **Music 50, 101, 102,** and two additional semester courses in music.

All students majoring or minoring in music are expected to participate in at least one regularly rehearsing departmental ensemble for at least one year.

10. People Studying People. Fall 1990. Ms. SMITH.

An examination of the ethics and implications of ethnomusicological and anthropological research. Considers such central questions as the power relations between developing and technologically developed societies, the impact of the researcher on traditional communities, ownership of music, and reciprocal obligation. The course is designed to encourage the student to consider various interrelated aspects of multifaceted, contemporary situations, and to develop skills in formulating and developing (in written form) a strong argument for a case that cannot, in essence, be proven.

§100. World Music. Fall 1990. Ms. SMITH.

Survey of the music of selected areas, including Africa, Western Europe, North America, and the Caribbean. The course covers (1) the historical, social, and cultural context; (2) theoretical systems, form, and aesthetics; and (3) major representative musical and dance genres. Emphasis is placed on the wide variety of possibilities for structuring music sound and the different cultural ideas and aesthetics that are brought to bear in this process.

101. Theory I: Fundamentals of Music Theory. Every year. Fall 1990.
Ms. GIRDHAM.

For students with little or no previous training in music. A study of the organized systems underlying Western music: beats, meter, and rhythm; pitches, intervals, scales, chords, and keys; an introduction to chromaticism, modulation, and simple tonal forms. Training in aural competence,

keyboard applications, and development of fluency in reading and writing musical notation are stressed. Three class hours plus one hour weekly in musicianship skills laboratory.

102. Theory II: Diatonic and Chromatic Harmony. Every year.

Spring 1991. Ms. SMITH.

Study of diatonic and chromatic harmony and of large-scale 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 keyboard laboratory.

Prerequisite: **Music 101** or equivalent.

103. Aural Theory. Every other spring. Spring 1991. MR. GREENLEE.

Aural study of melody, harmony, intonation, rhythm, timbre, and form, focusing on European music of the eighteenth and nineteenth centuries.

Prerequisite: **Music 102** or concurrent registration.

[121. **History of Jazz.**]

125. Music and Society during the Renaissance. Spring 1992.

MESSRS. GREENLEE AND NYHUS.

This analysis of music and society focuses on the interrelations between music and the church, class structure and social values, and on the differing concepts of the Renaissance in historical and musicological literature. (Same as **History 124.**)

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.

132. Studies in Music Literature: The Beethoven Symphonies.

Spring 1991. MR. MCCALLA.

The nine symphonies are studied in the context of the classical style and the evolution of Beethoven's symphonic style. Emphasis is placed on the formal structure of the works; stylistic elements are considered as they contribute to an understanding of structure. The symphonies are also discussed as documents of Western intellectual history and for shaping the evolution of power in the nineteenth century.

135. Opera: Love Sometimes Conquers All. Fall 1990. MR. MCCALLA.

The class will study a number of operas dating from the late eighteenth to the mid-twentieth centuries in which romantic love is not just the excuse for the plot, but a crucial determinant in the thematic complex of the work and, more generally, a reflection of contemporary attitudes toward humanity and the human condition.

The focus and specific operas studied may change from year to year.

137. Studies in Music Literature: Music in England. Fall 1990.

MR. SCHWARTZ.

A survey of English music from the Middle Ages to the present, including the contributions of such major figures as Dunstable, Purcell, Dowland, Handel, Elgar, Delius, Vaughan Williams, Britten, and Tippett. Music's social roles and relationships to other arts are also discussed, with special emphasis on the Elizabethan era, the Victorian period, and the twentieth century. Class activities include attendance at concerts of English music and lectures by visiting British composers and critics.

Prerequisite: One course in music, English history, or English literature.

§138. Music of Sub-Saharan Africa. Spring 1991. MS. SMITH.

An introduction to the music of selected groups in sub-Saharan Africa, including the historical context, aesthetics, form and structure, and related dance forms. Emphasis is on traditional musics of West Africa, but musics of other areas and nontraditional forms are considered where appropriate.

201. Theory III: Counterpoint. Every year. Fall 1990. MR. MCCALLA.

Practice in contrapuntal composition in eighteenth-century tonal styles.

Prerequisite: **Music 102.**

202. Theory IV: Theory and Analysis of Late Chromatic and Twentieth-Century Music. Every year. Spring 1991. MR. MCCALLA.

Study and formal analysis of styles representing the late nineteenth and twentieth centuries, including compositions by Debussy, Ives, Mahler, Schoenberg, Hindemith, Webern, and more recent composers.

Prerequisite: **Music 201.**

Topics in Music History.

Music 301 and **302** are intended primarily for music majors. **Music 101** and **102** are prerequisite or corequisite.

301. Music History: Antiquity to 1750. Fall 1990. MR. GREENLEE.**302. Music History: 1750 to the Present.** Spring 1991. MS. GIRDHAM.**361. Orchestration.** Fall 1990. MR. SCHWARTZ.

Transcription, arrangement, and free composition for ensembles of stringed, woodwind, and brass instruments, percussion, and piano, the primary aim being that of effective instrumentation. Intensive study of orchestral and chamber scores, drawn from the music literature.

Prerequisite: **Music 101, 102.**

[371. Composition.]

Performance Studies

Not more than six credits of individual performance and ensemble courses together may be taken for graduation credit. For administrative purposes, **applied music** and **ensemble study** will bear one of the following course numbers, depending on each new semester of study the individual student has taken: **Music 221–228**, Concert Band; **Music 235–242**, Applied Music; **Music 251–258**, Chorale; **Music 261–268**, Orchestra; **Music 271–278**, Chamber Choir; **Music 281–288**, Ensembles (Quartet, Quintet, etc.).

Instructors in 1989–90 included Julia Adams (viola), Naydene Bowder (piano), Neil Boyer (oboe), Judith Cornell (voice), Ray Cornils (organ), Alison Hale (flute), John Johnstone (guitar), Stephen Kecskemethy (violin), Margery Landis (French horn), David Libby (jazz piano), Mark Manduca (trombone), John Morneau (saxophone), Martin Perry (piano), George Rubino (bass), and Eva Virsik-Shimada (piano).

235–242. Individual Performance Studies. Every year.

The following provisions govern applied music for credit:

1. Necessary for admission are two music courses. These should be taken concurrently with the first two semesters of performance studies (**Music 235, 236**).

2. Individual performance courses are intended for the continued study of an instrument with which the student is already familiar. Students may enroll only with the consent of the department. Students must take at least two consecutive semesters of study on the same instrument to receive any credit.

Admission is by audition only. Only students who are intermediate or beyond in the development of their skills are admitted.

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.

3. One half-credit is granted for each semester of study.

4. The student pays a fee of \$200 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. Normally, instruction is available in bassoon, cello, clarinet, flute, guitar, harpsichord, oboe, organ, piano, saxophone, trombone, trumpet, viola, violin, and voice.

Ensemble Performance Studies. Every year.

The following provisions govern ensemble:

1. Ensemble music courses are intended to provide a student with experience in group music-making. Students are admitted to an ensemble class only with the consent of the department 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 will be Credit/Fail.

4. Ensembles meet regularly for a minimum of three hours weekly. Chamber ensembles are offered only as instruction is available.

5. Each ensemble will perform in public

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Neuroscience

ASSOCIATE PROFESSOR ROSE, *Chair*

Requirements for the Major in Neuroscience:

I. Core Courses:

A. Biology Courses:

Biology 101: Introductory Cell Biology.

Biology 102: Biology of Organisms and Populations.

Biology 203: Comparative Neurobiology.

B. Psychobiology Courses:

Psychobiology 265: Psychobiology.

Psychobiology 245: Neuropsychology, *or*

Psychobiology 300: Psychopharmacology.

C. Psychology Courses:

Psychology 101: Introduction to Psychology.

Psychology 270: Cognition, *or*

Psychobiology 230: Perception.

D. Chemistry Courses:

Chemistry 225: Elementary Organic Chemistry.

E. Statistics/Mathematics Courses:

Psychology 250: Statistical Analysis

II. Additional Courses Required: Two from the lists below, at least one of which must be in biology.

A. Biology:

113: Genetics.

114: Comparative Physiology.

116: Developmental Biology.

151: Ethology.

261: Biochemistry I.

304: Topics in Biochemistry and Molecular Biology.

305: Neuroethology.

B. Psychobiology:

200: Comparative Psychology.**230: Perception.****245: Neuropsychology.****300: Psychopharmacology.**

C. Psychology:

210: Developmental Psychology.**220: Atypical Child.****260. Abnormal Personality.****270: Cognition.****271: Language: A Developmental Perspective.****310: Clinical Psychology.****362: Infancy.**

III. Recommended Courses:

Philosophy 225: The Nature of Scientific Thought.**Physics 103: Mechanics and Matter.****Sociology 251: Sociology of Health and Illness.**

Philosophy

PROFESSOR CORISH, *Chair*; PROFESSOR MCGEE; RESEARCH PROFESSOR POLS;
ASSOCIATE PROFESSOR COLEMAN (*on leave*); ASSISTANT
PROFESSORS SIMON AND SWEET

Requirements for the Major in Philosophy: The major consists of eight courses, which must include **Philosophy 111, 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 consent of the instructor.

Topics change from time to time but are restricted in scope and make no pretense at being an introduction to the whole field of philosophy. They are in all cases topics in which contemporary debate is lively and as yet unsettled and to which contributions are being made by more than one field of learning.

10. Mind and Body. Spring 1991. MR. SWEET.

An investigation of the major problems concerning the distinction between mind and body, and the nature of their relationship. Drawing from a variety of classical and modern philosophical theories, we examine the following questions: Is there a radical distinction between mental and physical entities? What are the essential distinguishing characteristics of mind and body? How can we account for their apparent causal interaction? Can one be explained in terms of, or reduced to, the other? Can physical things be understood in terms of mental activities? Or can mental phenomena be understood in terms of the physical states and activities of the brain? Is it possible to build a machine that can think?

11. Free Will. Fall 1991. Ms. COLEMAN.

An examination of the question of whether or not we have what has traditionally been called free will. 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? Today the question is often dealt with in terms of the related concept of moral responsibility. Are we really responsible agents, as our tradition tells us we are? This question then leads to a number of others. What do we mean when we say that people are responsible for their actions? Are the concepts of moral and legal responsibility of permanent human importance, or should they be replaced by concepts that are more suited to certain contemporary deterministic views of human nature? What role does reasoning play in human action? Can reasoning be understood in deterministic terms? Readings in contemporary and older materials are used as the basis for the seminar discussions.

[13. Basic Problems in Philosophy.]

14. Literature as Philosophy. Fall 1991. MR. MCGEE.

After a presentation of the explicitly philosophical background of the literary works to be studied, the philosophic life-attitudes expressed in them are examined to determine their adequacy as philosophy and their relevance to conduct. The literature varies from time to time but always includes one major contemporary work and one major older work.

15. Self and Self-Knowledge. Fall 1990. MR. CORISH.

What is the self? What knowledge do we have of the self? Is that knowledge similar to or different from our knowledge of the world about us—that is, is knowledge of the subject similar to or different from knowledge of an object? These and other questions (e.g., personal identity, the unconscious, emotion) are discussed. Readings range from ancient (Plato, Aristotle, Augustine) to modern (Hume, Kant, perhaps Freud, Jung, the behaviorists).

16. Moral Problems. Fall 1990. MR. SIMON.

Our society is rife with moral controversies. This course examines a number of moral problems with two goals: (1) to encourage more systematic and analytic thinking about a number of complex and difficult moral issues, and (2) to raise questions concerning how to think about moral problems, that is, to examine how moral reasoning proceeds.

Each semester, the problems to be studied are drawn from a list including abortion, suicide, euthanasia, capital punishment, affirmative action, discrimination and equal opportunity, homosexuality, human rights and civil disobedience, creationism, sociobiology, and war and nuclear deterrence.

Introductory Courses

51. Philosophy and Poetry. Spring 1991. MR. CORISH.

A study of some recognized philosophical doctrines as they appear in poetry, e.g., the philosophical doctrines of Aquinas in the poetry of Dante, those of Duns Scotus in the poetry of Hopkins, the doctrine of metempsychosis in Wordsworth's *Intimations of Immortality*, Kantian doctrines in Coleridge, etc. Doctrines and poets considered may vary from year to year. We also discuss poetic techniques and expressions in philosophy, as, for example, in Parmenides and Plato, and devote some considerable time to a philosophical discussion of the nature of poetry.

54. Logic and the Limits of Language. Spring 1991. MR. MCGEE.

An introduction to the liberal art of critical thinking. Examines the use of language, definition, induction, deduction, argument from analogy, and informal fallacies. Stresses the application of the principles of logic to the evaluation of contemporary social and political issues.

58. Environmental Ethics. Fall 1990 and fall 1991. 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. This course examines the ethical theories and assumptions that inform the debates over this issue and in general over how to treat the environment. Specific topics to be covered include utilitarianism versus rights theory, the nature and justification of anthropocentrism, animal liberation and the rights of nonhuman sentient things, preservation of endangered species, the ethics of preserving the wilderness, the moral status of nonsentient living things, holism versus individualism, the land ethic, and attitudes toward land use. (Same as **Environmental Studies 258.**)

111. Major Philosophers of the West: Beginnings to Christianity. Fall 1990. MR. MCGEE. Fall 1991. MR. SWEET. Fall 1992. MR. MCGEE.

The sources and prototypes of Western thought. The main emphasis

of the course is on Plato and Aristotle, but some attention is 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.

112. Major Philosophers of the West: Renaissance to Idealism.

Spring 1991. Mr. CORISH. Spring 1992. MR. MCGEE.

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 five or six of 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.

200. Major Philosophers of the West: The Nineteenth Century.

Fall 1990. MR. SWEET. Fall 1992. MR. MCGEE.

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, Schelling, and Hegel; the decline and fall of reason from Hegel to Schopenhauer and Kierkegaard; dialectical materialism, utilitarianism, and the origins of positivism.

Prerequisite: **Philosophy 112** or consent of the instructor.

221. Ethics. Spring 1992. Ms. COLEMAN.

Various types of answers to the questions What is right for me to do? What ought to be done? and What is the good for man? are traced to their philosophic bases in historical and contemporary sources. The justification these bases provide is critically discussed, and some possible meanings of statements used to answer questions in morals are made explicit and compared.

222. Political Philosophy. Fall 1991. MR. SIMON.

Examines some of the major issues and concepts in political philosophy, including political obligation and consent, freedom and coercion, justice, equality, and democracy. Readings from classical texts (Hobbes, Locke, Rousseau, Mill) as well as contemporary sources. Time permitting, additional readings focus on contemporary criticisms of liberalism.

223. Logic and Formal Systems. Spring 1992. 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.

225. The Nature of Scientific Thought. Fall 1991. 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 Burt, Butterfield, Duhem, Hempel, Koyré, Kuhn, Nagel, Poincaré, Popper, and Toulmin, as well as classical authors such as Galileo, Descartes, Newton, Berkeley, and Leibniz.

226. On Love. Spring 1991. MR. MCGEE.

An examination of philosophic attempts to analyze and clarify the cluster of concepts signaled by terms such as "love," "friendship," "charity," "agape," and "fellow-feeling." Readings are drawn from some of the following authors: Plato, Aristotle, St. Paul, St. Thomas, Spinoza, Schopenhauer, Nietzsche, Freud, Ortega y Gasset, and C. S. Lewis.

228. Philosophy of Psychology. Fall 1991 and spring 1993.

MS. COLEMAN.

Philosophy of psychology is the examination of metaphysical questions concerning the way in which mental phenomena fit into a total picture of reality and of the theoretical presuppositions of empirical research in psychology. How are mental functions related to brain states? Is perception of external objects direct or indirect? Do reasons, beliefs, desires, and purposes ever cause actions? Are all actions selfish? What is a concept? Is it an image, a set of procedures, or a list of features?

229. Philosophy of Art. Fall 1990. MR. SWEET.

A comparative study of the nature of meaning in poetry, music, and the visual arts. The course focuses on selected major works in these three fields, and, in this concrete setting, the relations between meaning and the expressive and productive (or creative) aspects of art are explored.

230. Philosophy of the Social Sciences. Fall 1992. MR. SIMON.

The central issue in the philosophy of the social sciences concerns the nature and status of the social sciences, especially in relation to the natural sciences. When we study human beings, what kind of knowledge can we have, what methods should we use to acquire this knowledge, and of what use is this knowledge? This course focuses on these questions and a set of related topics, including three perspectives on the social sciences (naturalistic, interpretive, critical), the problem of cross-cultural rationality, explanation, objectivity and the status of values, and methodological individualism versus holism.

[231. Existentialism.]

235. Philosophy of Technology. Spring 1991 and spring 1993.

MR. SIMON.

The development of modern technology is perhaps the most crucial factor shaping life in the twentieth century. Much of our present environmental crisis is a direct result of the explosion in technology. The growth, use and abuse of technology, and our increasing reliance on it raise a number of philosophical questions that are neither fully appreciated nor understood. This course explores various of these questions, including the nature and growth of technology as a mode of addressing problems of the human condition, technology as a form of human expression and its relation to nature, views of technology as liberating versus imprisoning, and ethical and political problems raised by questions of the control and misuse of various technologies. (Same as **Environmental Studies 235.**)

236. Environmental Analysis: Political Philosophy. Spring 1992.

MR. SIMON.

An examination of environmental issues from the perspective of political philosophy: the tensions between collective responsibilities and individual rights, problems of collective decision-making and the formation of policy, and questions of justice and our responsibilities to others. Problems to be addressed may include energy policy, resource exhaustion, and waste disposal; agricultural policy, food policy, and world hunger; acid rain; the greenhouse effect; population policy; and exploitation of oceanic resources and the pollution of the oceans. (Same as **Environmental Studies 236.**)

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.

300. Marx. Spring 1992. MR. SIMON.

Examines the thought of Karl Marx. The primary readings will be from Marx's major writings. Topics covered include Marx's methodology and philosophical anthropology, alienation, exploitation, historical materialism, the theory of class and politics, and ideology.

331. Plato and Platonism. Spring 1992. MR. CORISH.

A study of some of the principal dialogues of Plato, drawn chiefly from his middle and later periods, followed by a study of selected material from the later history of Platonism. The instructor selects the dialogues that will be read, but topics to be studied in later Platonism and Neoplatonism will depend on the particular interests of the students.

Prerequisite: **Philosophy 111** or consent of the instructor.

[332. The Analytic Movement.]

334. **Topics in Medieval Philosophy.** Fall 1992. MR. CORISH.

An examination of some fundamental medieval views concerning man and his environment. Special attention is paid to the Aristotelian worldview as made over to Christian specifications, and to its decline in favor of the modern scientific view of man and the world.

Prerequisite: **Philosophy 111** or consent of the instructor.

335. **The Philosophy of Aristotle.** Fall 1990 and fall 1992. 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 political and moral philosophy are examined in terms of detailed specific doctrines, such as that of kinds of being, the highest being, the soul, virtue, and the state. Ends with a discussion of Aristotle's views of systematic research and his influence on subsequent thought.

Prerequisite: **Philosophy 111** or consent of the instructor.

336. **Spinoza's Ethics.** Fall 1990. MR. MCGEE.

A detailed study of the text of Spinoza's major work, *The Ethics*.

Prerequisite: **Philosophy 111** and **112**.

337. **Hume.** Spring 1993. Ms. COLEMAN.

A critical examination of the meaning and extent of Hume's skepticism, covering his epistemology and metaphysics, moral and political philosophy, and philosophy of religion.

Prerequisite: **Philosophy 112** or consent of the instructor.

338. **Kant.** Fall 1991. MR. MCGEE. Fall 1992. Ms. COLEMAN.

A detailed examination of *The Critique of Pure Reason*.

Prerequisite: **Philosophy 112** or consent of the instructor.

340. **Contemporary Ethical Theory.** Spring 1991. MR. SIMON.

Important recent debates in ethics have called into question the nature and status of traditional ethical theories and the very nature of morality itself. This course examines some of these debates through the writings of major contemporary theorists, including Williams, MacIntyre, Nagel, and Rawls.

341. **Twentieth-Century Continental Philosophy.** Spring 1991.

MR. SWEET.

290. **Intermediate Independent Study.** THE DEPARTMENT.400. **Advanced Independent Study and Honors.** THE DEPARTMENT.

Physics and Astronomy

PROFESSOR EMERY, *Chair*; PROFESSORS HUGHES AND LACASCE;
ASSOCIATE PROFESSOR TURNER; ASSISTANT PROFESSOR SYPHERS; VISITING
ASSISTANT PROFESSOR SCHMIEDESHOFF; TEACHING ASSOCIATE ROBERTS;
RESEARCH ASSOCIATE CHONACKY

Requirements for the Major in Physics: The major program in physics depends to some extent on the student's goals. These goals should be discussed with the department. Those who intend to do graduate work in physics should plan to do an honors project. For those considering a program in engineering, consult page 90. 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. In addition a major is expected to have a working knowledge of a computer language. This requirement can be satisfied by **Computational Physics 250, Computer Science 101, or Mathematics 244**, or by demonstrated competence. For honors work, a student is expected to complete **Mathematics 181 or 223, 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.

Requirements for the Minor in Physics: At least four 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 189–91.

Core Courses

- 103. Mechanics and Matter.** Every semester. Fall 1990. MR. EMERY.
Spring 1991. MR. LACASCE.

The basic concepts and laws of classical mechanics, with special emphasis on the conservation laws of momentum, energy, and angular momentum. Particle dynamics, including the motions of particles in gravitational, electric, and magnetic fields. A brief introduction to kinetic theory and special relativity. 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.

223. Electric Fields and Circuits. Every spring. Spring 1991.

MR. SCHMIEDESHOFF.

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: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

227. Waves and Quanta. Every fall. Fall 1990. MR. LACASCE.

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: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

228. Modern Physics. Every spring. Spring 1991. MR. EMERY AND MR. SYPHERS.

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: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

229. Statistical Physics. Every other fall. Fall 1991.

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: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

300. Methods of Theoretical Physics. Every spring. 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 consent of the instructor.

310. Introductory Quantum Mechanics. Every fall. Fall 1990.

MR. SYPHERS.

An introduction to quantum theory, solutions of Schroedinger equations, and their applications to atomic systems.

Prerequisites: **Physics 227** and **300**.

320. Electromagnetic Theory. Every other fall. Fall 1991.

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 consent of the instructor.

350. Solid State Physics. Every other spring. Spring 1991. MR. SYPHERS.

The physics of solids, including crystal structure, lattice vibrations, and energy band theory.

Prerequisite: **Physics 310**.

370. Advanced Mechanics. Every other fall. Fall 1990. THE DEPARTMENT.

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 consent of the instructor.

380. Elementary Particles and Nuclei. Every other spring. Spring 1991.

MR. EMERY.

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**.

450. Advanced Independent Study and 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

62. Contemporary Astronomy. Every spring. MR. HUGHES.

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 in this course is limited to 50 students. Students who have taken or who are taking **Physics 103** will not receive credit for this course.

63. **Physics of the Twentieth Century.** Every fall. MR. HUGHES.

Although the physics of the eighteenth and nineteenth centuries enjoyed many great successes, there was by the end of the nineteenth century a growing awareness of the limitations of what we now call classical physics. This course traces the discovery of those limitations and the rise of modern physics. Topics discussed include the development of quantum mechanics and relativity, the origin and growth of nuclear and elementary particle physics, the rise of electronics, and those aspects of technology which have had a special relationship with physics.

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.

240. **Digital Electronics.** Every other fall. Fall 1990.

MR. SCHMIEDESHOFF.

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: **Physics 103.**

[250. **Topics in Physics.**]

255. **Physical Oceanography.** Fall 1991. MR. LACASCE.

The aim is to provide a feel for the scope of physical oceanography. Among the topics covered are tidal theory, surface and internal waves, and the heat budget and its relation to the oceanic circulation. Some attention is given to the problems of instrumentation and the techniques of measurement.

Prerequisites: **Physics 103** and **Mathematics 161.**

260. **Biophysics.** Every spring. MR. HUGHES.

An introduction including discussion of the effects of ionizing radiation on cells and tissues, the application of X-ray diffraction methods to biological problems, and other modern topics. Some attention is given to historical aspects of the subject and to the development of devices such as the electron microscope.

Prerequisites: **Physics 103, Chemistry 101, 102, and Mathematics 171.**

262. **Astrophysics.** Every fall. MR. HUGHES.

A quantitative discussion that introduces the principal topics of astrophysics, including stellar structure and evolution, planetary physics, and cosmology.

Prerequisite: **Physics 103.**

290. 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.

400. 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.

Psychology

ASSOCIATE PROFESSOR HELD, *Chair*; ASSOCIATE PROFESSOR ROSE, *Director of the Psychobiology Program*; PROFESSOR FUCHS; ASSOCIATE PROFESSORS SCHAFFNER AND SMALL; ASSISTANT PROFESSOR LOVETT; VISITING ASSISTANT PROFESSOR ROTH; INSTRUCTOR MCKILLOP; VISITING LECTURER EVANS

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 205–6). 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 advisers and are subject to departmental review. The nine courses include **Psychology 101**, **Psychology 250** (taken during the sophomore year if possible), and an advanced course numbered 300–399. Two psychology laboratory courses numbered 260–279 must be taken after statistics and, if possible, before the senior year. 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**, and **300**.

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**, and **300**.

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, 270, and 361**; these courses cover the topics usually included in educational psychology. In addition, prospective teachers may find **Psychology 211, 212, 220, and 271** compatible with their interests and helpful in their preparation for teaching.

Requirements for the Major in Neuroscience: See Neuroscience, pages 205-6.

Courses in Psychology

First-year Seminar

- 10. Psychological Curiosity: Modeling Social Processes.** Every other year. Spring 1992. MR. SCHAFFNER.

Elementary concepts of model building and exploration. Topics and examples are drawn from many areas of psychology and the related social sciences. Frequent written exercises provide the basis for class study of several central models in the social sciences. Individual projects combining written and oral presentations of an original model complete the term. Computer modeling is introduced, but no prior computing experience is presumed.

Introductory Courses

- 101. 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.

Intermediate Courses

- 210. Developmental Psychology.** Every spring. MS. LOVETT.

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.**

211. Personality. Every fall. Ms. HELD.

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.**

212. Social Psychology. Every spring. MR. MCKILLOP.

A survey of theory and research on psychological aspects of social behavior. Topics include conformity, language and communication, attitudes, prejudice and racism, social epistemology, interpersonal relationships, and group conflict. Class research projects supplement readings and lectures.

Prerequisite: **Psychology 101 or Sociology 101.**

213. Cognitive Science. Fall 1990. MR. ROTH.

What is the "cognitive revolution"? A multidisciplinary approach, borrowing from work in psychology, artificial intelligence, neuroscience, vision, anthropology, linguistics, and philosophy, is brought to bear on questions concerning the nature of knowledge and information processing.

Prerequisite: **Psychology 101.**

220. Atypical Child. Every other year. Fall 1990. Ms. HELD.

A comparative understanding of theories and research concerning the etiology, development, diagnosis, and treatment of various forms of childhood exceptionality. A family systems perspective is emphasized.

Prerequisite: **Psychology 210 or 211.**

222. Law and Psychology. Every other year. Spring 1991. Ms. HELD.

Presents topic areas where there is an interface between psychological and legal issues. The first emphasis is on how psychologists can study and aid the legal process. The second emphasis is on the special concerns of the mental health professional within the legal system. Enrollment limited to 30 students. No first-year students admitted.

Prerequisite: **Psychology 101.**

[**223. Political Psychology.**]

250. Statistical Analysis. Every fall. Ms. LOVETT.

An introduction to the use of descriptive and inferential statistics 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 Sociology 101**, or consent of the instructor.

260. 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.

270. Cognition. Every spring. MR. ROTH.

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**.

271. Language: A Developmental Perspective. Spring 1991.

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** and **250**, or consent of instructor.

272. Research in Social Behavior. Every other year. Fall 1990.

MR. MCKILLOP.

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

310. Clinical Psychology. Every other year. Fall 1991. Ms. HELD.

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 220** or **260**.

[311. History of Psychology.]

- 315. The Self in Social Psychology.** Fall 1990. MR. MCKILLOP.
A review of the theoretical and empirical literature related to the self-concept, with an emphasis on interpersonal approaches. Topics include public versus private aspects of the self, biases in self-related judgments, self-concept stability and change, and impression management.
Prerequisite: **Psychology 211 or 212.**
- 360. Cognitive Neuropsychology.** Fall 1990. MR. ROTH.
What does the brain do whenever we remember, generate and understand language, listen to a piece of music, feel emotions, recognize objects as we navigate in a three-dimensional world, or create and use mental images? The course attempts to provide answers to these questions by considering how the cognitive performance of individuals reflects the processing of information, with emphasis placed on the representation of visual mental images.
Prerequisites: **Psychology 250, and Psychology 210 or 270.**
- 361. Cognitive Development.** Fall 1991. 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.**
- [362. **Infancy.**]
- 363. Conflicts in Social/Personality Psychology.** Spring 1991.
MR. MCKILLOP.
This course focuses on several of the major debates currently raging within the fields of social and personality psychology. The existence of true introspective access, the primacy of affect versus cognition, the effects of control and control deprivation on health, and the changing nature of cognitive dissonance are discussed.
Prerequisites: **Psychology 250, and Psychology 211 or 212.**
- 290. Intermediate Independent Study.**
- 400. Advanced Independent Study and Honors.**

Courses in Psychobiology

- 50. Mind and Brain: Historical and Contemporary Issues.**
Every other year. Fall 1990. 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 genetics and behavior; psychopharmacology; biology's role in defining aggression, crime, mental illness, and other problems; its role in determining social policy; and biological arguments in race and sex discrimination, as well as cross-cultural comparisons between Western and Eastern illness treatment systems (Asian medicine, acupuncture, shamanism, etc.).

60. **Drugs, Behavior, and Human Society.** Every other fall. Fall 1991. MR. ROSE.

An introductory survey of psychoactive drugs and plants, toxins, food additives, 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 effects, 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.

[200. **Comparative Psychology.**]

230. **Perception.** Every other spring. Spring 1991. MR. ROSE.

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.

Prerequisite: **Psychology 101.**

245. **Neuropsychology.** Every other fall. Fall 1990. MR. ROSE.

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 versus nonspecific, general brain damage; 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.**

265. **Psychobiology.** Every spring. Spring 1991. MR. ROSE.

A basic course on 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 includes exposure to histological, neurosurgical, and physiological recording techniques in animals, but with the major emphasis on human electrophysiological recordings, to include central (EEG, evoked potentials), peripheral (EMG), and autonomic nervous system (EKG, etc.) measures, including biofeedback.

Prerequisite: **Psychology 101** or **Biology 101**.

300. Psychopharmacology. Every other spring. Spring 1992. MR. ROSE.

An advanced study of psychoactive drugs, their neural mechanisms of action, and their effect on animal and human behavior. Topics include experimental techniques in psychopharmacology; neuropharmacology; the role of neurotransmitters in appetitive behavior, learning, and memory; 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 consent of the instructor.

290. Intermediate Independent Study.

400. Advanced Independent Study and Honors.

Religion

PROFESSOR HOLT, *Chair*; PROFESSORS GEOGHEGAN AND LONG;
ASSISTANT PROFESSORS BERGREN, GILDAY, AND MAKARUSHKA;
RESEARCH ASSOCIATE GELWICK

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 adviser who assists the student in formulating a plan of study in religion and related courses in other departments. The adviser may also provide 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** (same as **Asian Studies 101**), **Religion 103** (Introduction to Western Religious Thought); two courses at the 200 level in Western, East Asian, or South 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 190.

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 contents changed.

§14. **Apocalyptic Visions of the End.** Fall 1990. MR. BERGREN.

An exploration of the ways in which human beings have anticipated a dramatic end to the world and, in some cases, the beginning of an entirely new era. Study of a variety of cases in their social and historical settings, including Indian and Persian philosophy and theology, Israelite religion and early Judaism, Islam, Melanesian "cargo cults," and early and modern Christianity.

16. Spiritual Journeys. Spring 1991. Ms. MAKARUSHKA.

An exploration of religious experience. Stories of quest, conversion, and witness in the personal histories of representative figures in the Western tradition such as Augustine, Hildegard of Bingen, Martin Luther, Pascal, John Woolman, Thoreau, Simone Weil, Dorothy Day, Elie Wiesel, Martin Luther King, and Michael Harrington.

§17. Japanese Mythology. Fall 1991. MR. GILDAY.

A systematic study of the early-eighth-century imperial sacred histories of the Japanese that provide a colorful introduction to the foundations of the Japanese world of meaning. Includes comparisons of various mythic and legendary accounts both from within and outside these official texts, and with patterns and themes typical of myths throughout the world. (Same as **Asian Studies 17.**)

Introductory Courses

101. Introduction to the Study of Religion. Fall 1990. MR. HOLT.

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.

§102. Asian Religious Thought. Spring 1991. MR. HOLT.

A critical examination of classical South and East Asian texts and contemporary interpretations to understand the basic principles of Asian religio-cultural and social thought. Classical texts include the *Bhagavad Gita*, the *Analects* of Confucius, and the *Tao Te Ching*. (Same as **Asian Studies 101.**)

103. Introduction to Western Religious Thought. Fall 1990.

Ms. MAKARUSHKA.

An examination of various expressions of Western religious thought through such genres as treatise, dialogue, autobiography, myth, ritual, art, and poetry arising from the forms of life in individual and communal religious experience.

Intermediate Courses

200. Jewish Origins. Fall 1990. MR. BERGREN.

A comparative study of the varieties of Judaism in late antiquity. Readings and discussions of various primary sources, including the Bible, Talmud, Midrash, and Dead Sea scrolls, along with modern interpretations.

Prerequisite: **Religion 101** or **103**, or consent of the instructor.

201. Christian Origins. Spring 1991. MR. BERGREN.

A comparative study of the varieties of Christianity in late antiquity. Readings and discussions of various primary sources, including the New Testament and nonbiblical writings, along with modern interpretations.

Prerequisite: **Religion 101** or **103**, or consent of the instructor.

202. Christianity. Fall 1990. MR. GEOGHEGAN.

An overview of Christianity from its beginnings to the present. Emphasis upon its conceptual, historical, and imaginal development as a whole. Extensive introductory use of films in conjunction with lectures and discussions. Concurrent readings in primary and representative sources, including those in the Bible, Augustine, Eckhart, Pascal, Teresa of Avila, Bonhoeffer, Bultmann, and Tillich.

Prerequisite: **Religion 101** or **103**, or consent of the instructor.

207. Palaces, Politics, and Art: Bas-reliefs in the Place of Assurnasir-pal II of Assyria. Fall 1990. MS. PORTER.

An examination of the interaction of religion, politics, and architectural art in ancient Assyria. A close study of original Assyrian bas-reliefs in the Bowdoin College Museum of Art and of the palace from which they came leads to further investigation of Assyrian culture and society and of the roles of religion and art in ancient political life. Study of the reliefs is supplemented by readings in historical and religious inscriptions from Assyria, archaeological reports, and modern critical essays. (Same as **Archaeology 207** and **History 207**.)

208. Religions of the Greco-Roman World. Spring 1991.

MR. BERGREN.

A study of major religious movements that flourished in the Mediterranean world during the Greco-Roman period, 300 B.C. to A.D. 300, including "pagan" (non-Jewish, non-Christian) religious trends (e.g., mystery religions), Judaism, and Gnosticism. (The Christianity of this period is covered in **Religion 201**.) Emphasis is placed on the interactive diversity among various modes of religious expression. (Same as **Classics 208**.)

Prerequisite: **Religion 101** or **103**, or consent of the instructor

§222. Buddhist Thought. Fall 1990. MR. HOLT.

An examination of principal Buddhist categories of religious thought as these arise in representative genres of Buddhist literature, including the Pali *Nikayas* and the *Vinaya* of Theravada tradition and Sanskrit *Sutras* of the Mahayana traditions. (Same as **Asian Studies 242**.)

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

§223. Buddhism, Culture, and Society. Spring 1991. MR. HOLT.

A study of the ways in which Buddhist religious sentiments are expressed aesthetically and politically within the social and cultural

histories of India, Sri Lanka, and Burma. Emphasis on the transformation of Buddhism from a world-renouncing ethic to a foundational ideology of society and culture. (Same as **Asian Studies 243.**)

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

§224. Japanese Religion and Culture I. Fall 1991. MR. GILDAY.

Paradigmatic themes and problems addressed in classical literary, religious, and historical texts of the premodern period. Various ritual, theatrical, and artistic expressions provide a "textual" context for discussion. (Same as **Asian Studies 285.**)

§225. Japanese Religion and Culture II. Spring 1992. MR. GILDAY.

An introduction to the major trajectories of Japanese religion and culture from the sixteenth to the twentieth century, with particular attention to problems of continuity, change, and interpretation during the modern era. (Same as **Asian Studies 286.**)

[**§228. Religion, Magic, and Science in Ancient China.**]

(Same as **Asian Studies 265.**)

[**240. Western Religious Thought I.**]

[**241. Western Religious Thought II.**]

250. Western Religion and Its Critics. Fall 1990. MS. MAKARUSHKA.

Modern challenges to belief in God from Hume, Darwin, Feuerbach, Marx, Nietzsche, and Freud.

Prerequisite: **Religion 101** or **103**, or consent of the instructor.

251. Problems in Contemporary Religious Thought. Spring 1991.

MS. MAKARUSHKA.

Focus on the concept and existence of God, the problem of evil, faith and reason, and human destiny, addressed through comparison of Jewish and Christian thinkers.

Prerequisite: **Religion 101** or **103**, or consent of the instructor.

[**§287. Pure Land Buddhism in East Asia.**]

(Same as **Asian Studies 287.**)

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 contents changed.

[**302. The Bible in Jewish and Christian Religion.**]

[**§303. Exoticism and the East: Encounters with Holy Others.**]

(Same as **Asian Studies 390.**)

[305. Depth Psychology and Creativity.]

[306. Creative Process in Abstract Painting, Depth Psychology, and Religious Thought.]

The following courses, 390 or higher, presuppose prior or concurrent fulfillment of five requirements for the religion major. The seminars are also open to religion minors and qualified nonmajors by consent of the instructor.

390. **Phenomenology and Interpretation of Religious Experience.**

Fall 1990. MR. GEOGHEGAN.

A seminar investigating the possibility of understanding and explaining religious experience as *sui generis* and in relation to other phenomena, and the methods used to study them. Consideration of notable proponents of phenomenological method such as Hegel, Husserl, Otto, and Tillich, along with pertinent psychological, philosophical, theological, and critical implications.

Emphasis on developing ability to use phenomenological method through individual research, oral reports, group discussion, and guided preparation of a substantial final seminar paper.

290. **Intermediate Independent Study.** THE DEPARTMENT.

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

Romance Languages

PROFESSOR TURNER, *Chair*; PROFESSOR THOMPSON;
ASSOCIATE PROFESSORS NUNN AND VANDERWOLK;
ASSISTANT PROFESSORS DILLMAN, DUPUY SULLIVAN, JAFFE,
AND MAZAOUÏ; VISITING ASSISTANT PROFESSOR BRUGMANS;
LECTURER PELLEGRINI; INSTRUCTOR RUGGIERO;
TEACHING FELLOWS ANGLADE, BRIGAUD, AND CUMBRERA

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 basic 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, Spanish, or Italian 204**. In French and Spanish these will normally be **205, 209, 311, 312**, and four other courses. The major may consist entirely of courses in either French or Spanish, or it may involve a combination of courses in French, Spanish, and Italian. It is expected that majors who are not writing an honors project will enroll in a topics 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 209** before the end of their sophomore year.

Requirements for the Minor in Romance Languages: The minor consists of four 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.

First-year Seminars in Romance Literatures

Spring 1991

11. **Silences and Voices of Latin American Women.** Ms. JAFFE.

An introduction to literature by Latin American women. Discussion focuses on the quest for community, responses to machista myths and stereotypes, and political commitment. Readings, in English translation, of Sor Juana Inés de la Cruz, Elena Poniatowska, Isabel Allende, Rosario Ferré, Luisa Valenzuela, Rosario Castellanos, and Rigoberta Menchu.

French

101, 102. **Elementary French.** Every year. Ms. DUPUY SULLIVAN.

Study of the basic forms, structures, and vocabulary. Emphasis on listening comprehension and spoken French. During the second semester, some stress is placed on reading. There are regular language laboratory assignments.

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 consent of the instructor.

[119. **Seminars for First- and Second-year Students.**]

- 203. Intermediate French I.** Every fall. Fall 1990. Ms. DUPUY SULLIVAN and Mr. NUNN.
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.
- 204. Intermediate French II.** Every spring. Spring 1991. THE DEPARTMENT.
Continued development of oral and written skills; expansion of vocabulary through short readings in French literature. Active use of vocabulary and syntactic structures in class discussion and short compositions.
Prerequisite: **French 203** or placement.
- 205. Advanced French I.** Every fall. Fall 1990. Mr. BRUGMANS.
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.
- 206. Advanced French II.** Every spring. THE DEPARTMENT.
Intensive course in composition and conversation. Compositions stress grammatical accuracy, vocabulary, and style. Conversations based on readings of literary texts, magazines, and newspapers. *Recommended for all French majors.*
Prerequisite: **French 205** or placement.
- 209. Introduction to French Literature.** Every fall. Fall 1990. Mr. MAAZAOUI.
An introduction to the appreciation and analysis of French literature through close readings, short papers, and discussions of selected poems and short prose works from various periods of French literature. The major writers selected include Molière, Corneille or Racine, Ronsard, La Fontaine, Hugo, and Sartre. The aim is to introduce the student to a critical approach to literature in general and to French literature in particular. Though this is not a survey course, it provides illustrations of chronological succession in French literature. Papers and class discussions in French.
Prerequisite: **French 205** or placement.
- 312. Survey of French Literature II.** Spring 1991. 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 (*Rêveries d'un promeneur*

solitaire). Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

313. French Poetry I. Fall 1991. Ms. DILLMAN.

A study of French poetry from the Renaissance to the late nineteenth century. Emphasis on the nature of poetry as a play upon and with language. Close attention is paid to active understanding of the "rules of the game": the poetic devices and generic conventions, and their evolution. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

314. French Poetry II. Spring 1991. MR. BRUGMANS.

Modern poetry, like all modern forms of artistic expression, is an attack on established forms of organization and perception. It aims to abolish or at least to rethink traditional notions such as prose and poetry, art and non-art, conscious and unconscious, subject and object. The course examines these aspects of modernism in the works of Rimbaud, Baudelaire, Breton, Césaire, Michaux, and Ponge. Conducted in French.

315. French Drama I. Fall 1990. 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.

316. French Drama II. Fall 1991. THE DEPARTMENT.

Critical study of dramatic theory and practice of the modern period. The principal authors studied are Artaud, Arrabal, Beckett, Genêt, Ionesco, and Sartre. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

317. The French Novel I. Fall 1991. MR. VANDERWOLK.

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 consent of the instructor.

318. The French Novel II. Fall 1990. MR. MAAZAOUI.

Development of the novel in the modern period. Close attention is paid to critical theory in order to redefine the novel as a genre. Principal authors to be studied are Gide, Proust, Sartre, and Robbe-Grillet. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

[319. **French Women Writers and Writing.**]

320, 321. Topics in French Literature and Culture I. Every year.

Designed to offer students who have a general knowledge of French literature and civilization the opportunity to study in greater depth

individual authors, particular themes, or aspects of French civilization. Conducted in French. The course may be repeated for credit with the contents changed. Intended primarily for seniors.

French Civilization. Fall 1990. MR. BRUGMANS.

Fictionalité. Spring 1991. MS. DUPUY SULLIVAN.

400. Independent Study. THE DEPARTMENT.

Italian

101, 102. Elementary Italian. Every year. Fall 1990. MS. RUGGIERO.
Spring 1991. MS. PELLEGRINI.

Three class hours per week, plus drill sessions and 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.

203, 204. Intermediate Italian. Every year. Fall 1990. MS. RUGGIERO.
Spring 1991. THE DEPARTMENT.

Three class hours per week and one weekly conversation session with the teaching 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 consent of the instructor.

[**205. Advanced Italian I.**]

206. Advanced Italian II. Every spring. Spring 1991. MS. RUGGIERO.

Intended to increase proficiency in the four skills. Written and oral work based upon readings in modern Italian literature. Emphasis on spoken language as well as expository and creative writing. Visual media are used to introduce the study of culture.

Prerequisite: **Italian 204** or consent of the instructor.

[**209, 210. Introduction to Italian Literature.**]

[**321. Modern Italian Culture.**]

322. Italian Literature in Translation. Spring 1991. MS. RUGGIERO.

A critical reading of selections from the founders of Italian literature: Dante, Petrarch, and Boccaccio. Emphasis on poetics as well as philosophical and theological concerns. Intended also as an introduction to the study and criticism of Italian literature, the course examines the ways in which the three major Italian figures of the Middle Ages establish an authorial voice within and against tradition.

400. Advanced Independent Study and Honors.

Spanish

- 101, 102. Elementary Spanish.** Every year. Fall 1990. Ms. JAFFE.
Spring 1991. MR. TURNER.

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 two years or less of high school Spanish. Juniors and seniors wishing to take **Spanish 101** must have the consent of the instructor.

- 203, 204. Intermediate Spanish.** Every year. Fall 1990. MR. THOMPSON.
Spring 1991. Ms. JAFFE.

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.

- 205. 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 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.

- 209. Introduction to the Study and Criticism of Hispanic Literature.**
Every spring. Spring 1991. MR. THOMPSON.

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.

- 311. Medieval and Golden Age Spanish Literature.** Every other year.
Fall 1991. MR. TURNER.

Readings from the major writers of the Spanish Renaissance and the baroque period. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

- 312. Modern Spanish Literature.** Every other year. Spring 1991.
MR. THOMPSON.

Readings from the major writers of Spanish literature from the eighteenth century to the modern period. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

313. Spanish-American Literature before the Twentieth Century.

Every other year. Fall 1990. Ms. JAFFE.

An introduction to the development of major literary movements and genres in Latin America from the colonial period through the nineteenth century. The course explores themes such as the quest for identity, civilization and barbarism, cultural layering, and utopias. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

314. Modern Spanish-American Literature. Every other year.

Spring 1992. Ms. JAFFE.

An introduction to modern Spanish-American literature from modernism to the generation of the Boom. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

320, 321. 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 consent of the instructor.

Latin American Poetry from Modernism Through Vanguardism.

Fall 1990. MR. THOMPSON.

Political Commitment and the Latin American Writer.

Spring 1991. MR. TURNER.

[322. Modern Spanish-American Literature in English Translation.]**400. Independent Study and Honors.** THE DEPARTMENT.

Russian

ASSOCIATE PROFESSOR KNOX, *Chair*; ASSOCIATE PROFESSOR MILLER;
INSTRUCTOR AND MELLON FELLOW LI; TEACHING FELLOW SHULSKY

Requirements for the Major in Russian Language and Literature: The Russian major consists of ten courses (eleven for honors). These will include **Russian 101, 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 (**Economics 214**; **Government 230, 235, and 271**; **History 217 and 218**).

Study Abroad: Students are encouraged to spend at least one semester in the Soviet Union. Two or three advanced Russian students will be chosen each year to study for two semesters in the Soviet Union as part of the Consortium of

American Colleges exchange. Because of the unusually rigorous demands made on language skills and the pressures associated with living for a year in this foreign country, preference may be given to seniors (awarded in their junior year). Other approved one-semester Russian language programs in Moscow and Leningrad are available to all students who have the equivalent of three years of study of Russian (two years for a summer semester program).

Advanced 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 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).

101, 102. Elementary Russian. Every year. THE DEPARTMENT.

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.

203, 204. Intermediate Russian. Every year. MR. MILLER.

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**.

305. Advanced Reading and Composition in Russian. Every fall.

THE DEPARTMENT.

Intended to develop the ability to read Russian at a sophisticated level by combining selected language and literature readings, grammar review, and analysis of Russian word-formation. Discussion and reports in Russian. Conversation hour with native speaker.

Prerequisite: **Russian 203, 204**.

309. Nineteenth-Century Russian Literature. Fall 1990. Ms. KNOX.

A survey of Russian literature of the nineteenth century. Special attention is paid to the genres of the short story and the *povest'* (short novel) of writers such as Pushkin, Lermontov, Gogol, Dostoevsky, and Tolstoy.

Prerequisite: **Russian 305**.

310. Modern Russian Literature. Spring 1991. Ms. KNOX.

An examination of various works of modern Russian literature (Soviet and émigré), with emphasis on the development of the short story and the *skaz* (folk tale). The differences and similarities between prerevolutionary and contemporary Soviet literature are discussed. Authors to be studied include Bulgakov, Pasternak, Brodsky, Shukshin, Aksyonov, and others. Short term papers. Conducted in Russian.

Prerequisite: **Russian 305**.

315. Translation in Russian Prose. Fall 1990. Mr. MILLER.

This course 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 different theories of and typical strategies for successful Russian-English translation; Russian grammatical structures and word groups that are especially difficult to render in English; and the cultural significance of assigned texts. Class discussion is conducted in Russian to the extent possible given the nature of the course.

Prerequisite: **Russian 305** or consent of the instructor. (May be taken concurrently with **Russian 305** with consent of the instructor.)

316. Topics in Literature. Spring 1991.

Specific literary genres or authors not covered in the other courses. This course may be repeated for credit with contents changed.

Russian Poetry. Spring 1991. THE DEPARTMENT.

Comparative study of readings from Russian nineteenth-century poetry, including the works of such poets as Baratynskij, Lermontov, Tjuchev, Nekrasov, and Fet. Selections from the eighteenth century (poetry of Lomonosov and Derzhavin), as well as from the twentieth century (Mandelstam, Majakovsky, Brodsky). This course includes discussion of Russian poetics and the cultural historical context of each poem. Reading and discussion are in Russian to the extent possible given the nature of the course.

Prerequisite: **Russian 305** or equivalent.

290. 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, such as Soviet media or translation of prose. This course may be repeated for credit with the contents changed.

Prerequisite: **Russian 305** or equivalent.

400. 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.

In English Translation

§215. Slavic Civilization. Every other year. Spring 1991. MR. MILLER.

An introduction to Slavic Eastern Europe, its ethnic and linguistic background, its ancient history, its subsequent political and cultural movements, its relationship to the West, and continuing problems of nationalism within Eastern Europe and the Soviet Union. A wide range of readings assigned from various fields.

220. Nineteenth-Century Russian Literature. Every other fall.

Fall 1990. MR. MILLER.

This course traces the development of Russian realism and the Russian novel. Discussion touches upon pre-nineteenth-century literature, 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.

221. Twentieth-Century Russian Literature. Every other spring.

Spring 1991. Ms. KNOX.

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. Special attention is given to the recurring Eastern or Scythian theme. Writers to be discussed are Andreyev, Bely, Zoshchenko, Bulgakov, Sinyavsky, Solzhenitsyn, Aksyonov, Brodsky, and others. Russian majors are required to do some of the reading in Russian.

222. 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 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. Fall 1990. Ms. KNOX.

Examination of 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, M. Ginzburg, and others. Russian majors are required to do some of the reading in Russian.

223. **Dostoevsky and the Novel.** Every other spring. Spring 1991.

Ms. KNOX.

An examination of 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, cynicism, and neuroses. Emphasis on Dostoevsky's anti-Western and antimaterialist bias in his portrayal of the tragic 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

ASSOCIATE PROFESSOR BELL, *Chair*; PROFESSORS KERTZER (*on leave*), McEWEN (*on leave spring semester*), AND ROSSIDES; ASSOCIATE PROFESSORS BOLLES (*on leave*) AND FLOGE (*on leave*); ASSISTANT PROFESSORS DICKEY AND KAPLAN; INSTRUCTORS CIEKAWY AND PHILLIPS; RESEARCH ASSOCIATES CRAWFORD AND CROSS

Requirements for the Major: In consultation with an adviser, 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, 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, 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.

The minor in sociology consists of five sociology courses, including **Sociology 201, 209, 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 either major or minor program, one semester 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 Honors grades 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

101. 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.

201. Introduction to Social Research. Every spring. MS. PHILLIPS.

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 consent of the instructor.

203. Families in American Society. Spring 1991. MS. BELL.

An examination of contemporary research on kinship, household composition, and the family life cycle in modern American society. Considers how family life has changed and why it varies today, drawing from several theoretical perspectives.

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

206. Urban Sociology. Spring 1992. Ms. FLOGE.

An investigation into the diverse social patterns of urban life. Attention is given to the expansion of urban populations in different cultural settings, contrasting the course of urbanization in the West and in traditional societies. The changing relation of urban centers to the rest of society is also analyzed, along with some of the problems generated by urbanization and contemporary approaches to resolving them. Students have an opportunity to study a particular aspect of urban society in depth.

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

§208. Race and Ethnicity. Fall 1990. MR. MCEWEN.

The social and cultural meaning of race and ethnicity, with special 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 between the status of racial and ethnic minorities in the United States and their status in other selected societies. (Same as **Afro-American Studies 208**.)

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

209. 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 capitalism, for example, Hobbes, Locke, the *philosophes*, Comte, Spencer, Sumner, and Ward, with special attention to Marx, Durkheim, Weber, and selected contemporary figures, including world system theorists.

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

210. Sociology of Work and Organizations. Fall 1990. Ms. BELL.

Exploration of the structure, function, and meaning of work in modern industrial society, especially the United States. Examination of the rise and composition of the industrial labor force and the experiences of workers in different occupations and professions. Analysis of the growth of complex organizations (bureaucracies), as well as their impact on and response to broader society from a variety of sociological perspectives. Consideration of alternatives (e.g., cooperatives, collectives).

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

213. Social Stratification. Spring 1991. 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 consent of the instructor.

214. Science, Technology, and Society. Spring 1992. MS. BELL.

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 consent of the instructor.

215. Criminology and Criminal Justice. Spring 1992. 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 consent of the instructor.

218. Sociology of Law. Fall 1990. MR. MCEWEN.

An analysis of the development and function of law and legal systems in preindustrial and industrial societies. Examination of 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 consent of the instructor.

219. Sociology of Gender Roles. Fall 1990. Ms. PHILLIPS.

Various theoretical perspectives, including role theory, are used to study gender roles and their implications for society and individuals. The extent and possible causes (including biological, cultural, social, and economic) of sexual differences in behavior are examined. Topics include historical changes in gender roles as well as cultural and national differences.

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

[§230. **The Populations of Asia.**]

235. Comparative Societies. Spring 1991. 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 consent of the instructor.

250. Collective Behavior. Fall 1992. MR. MCEWEN.

An examination of the nature of collective behavior, with primary emphasis on social movements. This course describes and analyzes social phenomena such as crowds, audiences, publics, riots, reform movements, conservative movements, and revolutions. Students may study a selected aspect of collective behavior in depth.

Prerequisites: Two courses in sociology or anthropology, or consent of the instructor.

251. Sociology of Health and Illness. Every fall. Ms. BELL.

This course 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; the illness experience; technical and ethical issues in medical research; health care and social change.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor. Not open to students who have previously taken **Sociology 151**.

310. Advanced Seminar: Current Controversies in Sociology.

Spring 1991. Ms. BELL.

Draws together different theoretical and substantive issues in sociology in the United States, primarily since 1950. Discusses current contro-

versies in the discipline, i.e., quantitative versus qualitative methodologies, micro versus macro perspectives, and pure versus applied work. Reviews and compares works by Parsons, Becker, Freidson, Garfinkel, Chodorow, and others, and considers their relationship to sociology as a whole.

Prerequisites: Junior standing and two courses in sociology, or consent of the instructor.

290. Intermediate Independent Study in Sociology. MS. BELL, MR. MCEWEN, MS. PHILLIPS, and MR. ROSSIDES.

400. Advanced Independent Study and Honors in Sociology. MS. BELL, MR. MCEWEN, MS. PHILLIPS, and MR. ROSSIDES.

Anthropology

[11. **First-year Seminar: Family Life in the European Past.**]

101. Introduction to Cultural Anthropology. Every spring.

MS. CIEKAWY.

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.

§102. Introduction to World Prehistory. Every fall. MS. KAPLAN.

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.

[§131. **African-American Cultures.**]

[§132. **Latin American Societies.**]

133. Modern Italy. Fall 1991. MR. KERTZER.

An overview of the development of modern Italian society, beginning with the unification of Italy in the mid-nineteenth century. Particular attention is paid to topics in social and political history, including the changing role of the Catholic church and religion, the creation of a national identity, the rise of the peasant leagues and the early socialist movement, life in the Fascist period, the successes and crises of the Italian

Communist Party, changes in family life and in male-female relations, the enduring conflict between northern and southern Italy, and the social implications of migration.

Prerequisite: Sophomore standing.

§134. Asian Civilizations. Fall 1990. 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**.)

201. Anthropological Research. Fall 1990. 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: Sophomore standing or higher; **Anthropology 101** strongly recommended.

203. Psychological Anthropology. Fall 1991. Ms. DICKEY.

This course focuses on four topics in psychological anthropology: culture and personality; the effects of culture on cognition; definitions and treatment of mental illness in different cultures; and the application of psychoanalytical theory in anthropology. Different approaches are examined to show how anthropological theories and cross-cultural studies can be combined with psychological analysis to help in understanding the cultural influences on human mental processes.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

[§206. A Cross-Cultural Perspective on Families.]

207. Ritual and Myth. Fall 1990. Ms. CIEKAWY.

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 consent of the instructor.

209. Politics, Culture, and Society. Fall 1991. Mr. KERTZER.

The cross-cultural study of politics 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? What social processes are

involved in attracting and mobilizing political support?

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

§220. Hunters and Gatherers. Spring 1992. Ms. KAPLAN.

Hunters and gatherers have been characterized as small groups of people who are constantly on the move and exhibit the simplest levels of social, political, and economic organization. This course traces the origins of this thinking and challenges this stereotype. Topics to be examined 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. This cross-cultural study 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.

222. Culture Through Performance. Spring 1991. 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. Cultural performance is approached in two ways: first, to see what it uniquely reveals about a culture to both natives and outsiders; and second, to consider what social, psychological, and political effects it can have on participants and their societies.

Prerequisite: Previous course in anthropology or sociology, or consent of instructor.

§231. Native Peoples and Cultures of Arctic America. Spring 1991.
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.

232. Peoples of Northernmost Europe. Fall 1991. Mr. BIGELOW.

An examination of the past and present cultures of northern Scandinavia, the far northern islands of the North Atlantic (the Orkney, Shetland, and Faeroe islands), Iceland, and Greenland. The anthropology of societies ranging from the early Viking explorers of North America

to the reindeer herders of modern Finland is discussed. Archaeological, ethnohistoric, and ecological evidence is reviewed in outlining the interplay of environmental and human factors that influenced the growth and, in some cases, the extinction of the northernmost Norse, Sami (Lapp), and Celtic cultures.

Prerequisite: Previous course in anthropology or sociology.

§233. Peoples and Cultures of Sub-Saharan Africa. Fall 1990.

Ms. CIEKAWY.

An introduction to the variety of societies found in Africa south of the Sahara, ranging from small nomadic foraging societies to large-scale, politically centralized societies. Topics covered include family life, kinship, economic organization, art, religion, and politics. Both traditional African societies and modern societies are examined.

Prerequisite: Previous course in either anthropology or sociology.

§235. South Asian Cultures and Societies. Fall 1991. 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.

§236. Political Identity and Leadership in South Asia. Spring 1991.

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.

§237. Relations of Power in India and China. Spring 1992. Ms. DICKEY.

This course focuses on relations of power based on gender and class, making a comparison between India, where gender and class hierarchies are firmly institutionalized, and China, where official attempts have been made since the Revolution to remove class and gender-based discrimination. The interrelationship of gender and class is examined, as are their influences on and connections with division of labor, religion, and health. Dominant and subordinate models and types of power are considered throughout the course. (Same as *Asian Studies 237*.)

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

§239. North American Indians. Spring 1992.

An overview and analysis of American Indian 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 on Indian societies; and the current situation—both on and off reservation—of North American Indians.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

301. Anthropological Theory. Every spring. Ms. CIEKAWY.

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, Mauss, Malinowski, Radcliffe-Brown, Mead, Geertz, and Lévi-Strauss.

Prerequisites: Two courses in anthropology or consent of the instructor.

290. Intermediate Independent Study in Anthropology. Ms. CIEKAWY, Ms. DICKEY, AND Ms. KAPLAN.**400. Advanced Independent Study and Honors in Anthropology.** Ms. CIEKAWY, Ms. DICKEY, AND Ms. KAPLAN.

Theater Arts

DIRECTOR OF THEATER RUTAN, *Chair*; ASSISTANT PROFESSOR AND
DIRECTOR OF DANCE VAIL; MR. HURLIN, Ms. JONES,
MR. RODERICK, AND MR. SARVIS

The Department of Theater Arts comprises two divisions: dance and theater. Although no major is offered, students with special interest are encouraged, with faculty advice, to self-design a major.

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—keen perception, imaginative problem solving, concentration, and respect for craft—important to original work in all fields.

101. Introduction to Dance. Fall 1990. Ms. VAIL.

This course is primarily concerned with dance and movement as historical, cultural phenomena. How do movement experiences shape our perception of the world? What is the relationship of dance and

movement to gender roles, political and social power, religion, personal and ethnic identity? What does dance reveal about conceptions of the body? How can anthropological perspectives illuminate one's own experiences with the body, movement, and dance?

Students combine the direct experience of learning dances from different cultures, including Afro-American jitterbug, traditional Bulgarian line dances, South Indian Bharata Natyam, French baroque dance, and contemporary improvisational forms, with readings, discussion, listening to music, and viewing videos and live performances. Workshop sections, sometimes with visiting experts, meet every other week, in addition to regular classes. No prerequisites. Enrollment limited to 20 students.

121. Topics in Dance History. Every other fall.

The Ballet: European Theater Dance from Louis XIV to the Present. Fall 1991. Ms. VAIL.

The history of Western European dance from the mid-seventeenth to the twentieth century. Examination of style in light of contemporaneous music and art, as well as the broader social context. Film, visiting artists, and live performances will supplement readings and discussion. This course may be repeated for credit with the contents changed.

141. Approaches to Choreography: Performance Art. Fall 1990.

MR. HURLIN.

A studio course, augmented by reading, discussion, and viewing, in which students explore the interdisciplinary contemporary theater form called performance art, blending acting, choreography, image, and sound. This course may be repeated for credit with the contents changed.

Prerequisite: Consent of the director of dance and the instructor. Enrollment limited to 15 students.

142. Approaches to Choreography: Improvisation and Composition.

Every spring. Spring 1991. Ms. VAIL.

A studio course, augmented by readings, discussion, and viewing, in which students learn to craft dances and multimedia performance works by exploring various improvisational and compositional methods. Readings, films, field trips, and visiting choreographers supplement class work, which results in a final project. This course may be repeated for credit with contents changed.

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

291. Intermediate Independent Study in Dance. Ms. VAIL.

401. Advanced Independent Study in Dance. Ms. VAIL.

Performance Studies

Performance studies courses earn one half-credit per semester. Each course may be repeated a maximum of four times for credit. Students may also participate in all classes on a co-curricular basis, space permitting, and with the consent of the instructor. Visiting instructors for 1990-91: Dan Hurlin, Gwyneth Jones, and Paul Sarvis.

- 171. Modern Dance Technique.** Every semester. MS. JONES AND MR. SARVIS.

Training for flexibility, strength, musicality, and coordination. Studio classes include exercises and movement combinations. Two 90-minute classes per week and participation in rehearsals for required performances. Graded Credit/Fail. Classes at the introductory and intermediate levels are taught by visiting instructors. Enrollment limited to 20 students.

- 181. Dance Repertory and Performance.** Every semester. MS. JONES, MR. SARVIS, and MR. HURLIN.

Students learn faculty-choreographed works or reconstructions of important historical dances. Class meetings are conducted as rehearsals for performance at the end of the semester. Two weekly 75-minute classes; rehearsal and performance participation required. Taught at the introductory and intermediate levels. Graded Credit/Fail. Enrollment limited to 12 students. *Fall 1990:* Mr. Hurlin offers a performance art repertory class.

Division of Theater

The Division of Theater in the Department of Theater Arts offers courses in acting and directing, set design, technical theater, and, on occasion, in areas of special interest. The theater technician teaches stagelighting.

- 63. Playwriting.** Fall 1990. MR. RUTAN.

A creative writing course focusing on the one-act play form.
Prerequisite: Consent of the instructor.

- 70. Acting and Directing.** Spring 1991. 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.

- 72. Technical Theater.** Every semester. MR. RODERICK.

An introduction to the fundamentals of stagelighting.
Prerequisite: Consent of the instructor. Enrollment limited to 10 students.

[271, 272. Topics in Theater.]

- 290. Intermediate Independent Study in Theater.** MR. RUTAN.

- 400. Advanced Independent Study in Theater.** MR. RUTAN.

Women's Studies

Administered by the Committee on Women's Studies

ASSISTANT PROFESSOR MAY, *Program Director*;

MS. HUNSINGER, *Program Assistant*

Women's studies is an interdisciplinary program that incorporates into the curriculum recent research done on women and gender. The women's studies program explores the relationship between traditional disciplinary approaches to women's roles and emerging perspectives in the arts, humanities, and natural and social sciences. The program addresses women's experience on its own terms, and, using gender as a category of analysis, examines the status of and the relationship between women and men.

Requirements for the Minor in Women's Studies: 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.

The women's studies courses below may also be used to formulate a student-designed major that emphasizes women's studies. Related independent studies are offered in all humanities and social science departments. Further information on women's studies is available at the Women's Studies Program office located in the Women's Resource Center.

101. Introduction to Women's Studies. Fall 1990. Ms. MAY.

Provides an interdisciplinary overview of issues and approaches central to the study of women and gender. Through historical and literary analysis, a series of cross-cultural themes is examined, including images and stereotypes of women, identity and role issues, creativity, work, feminism, and other gender-related concerns.

242. Sexuality and Reproduction. Spring 1991. Ms. MAY.

Theoretical and historical perspectives on human sexuality and reproduction, including an exploration of sexual mores and attitudes. Special attention is given to the changing ideologies and the role of religious and state authorities in regulating sexualities. Topics cover childbearing and parenting, AIDS as a social illness, lesbian and gay identity, and prostitution. Theoretical perspectives are drawn from Freud, Foucault, Judith Butler, and other analysts.

301. Race and Gender in American Society: A Dialogue. Fall 1991.

MS. MAY AND MR. STAKEMAN.

An examination of the similarities and differences in the ways race and gender have affected American society. Topics to be discussed include the nature of inferiority (biological and religious theories of inferiority, visual representations of inferiority), control over the body of another (marriage, slavery, plantation mistresses and slaves), race and gender in

the organization of labor (from labor unions to affirmative action), and the gender/race politics of resistance (the suffrage debates, racism in the feminist movement, sexism in the black movement). The course emphasizes the debate that has occurred around each of these issues, and calls for classroom debates, frequent short writing assignments, and student participation in discussion. (Same as **Afro-American Studies 301**.)

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

304. Feminist Theory. Spring 1992. Ms. MAY.

Examines major political and literary theories that explore the social construction of gender and the relationships between gender and power. This course uses an interdisciplinary approach to consider analyses from diverse perspectives such as radical feminism, French feminism and post-structuralism, and Marxist feminism.

Prerequisite: **Women's Studies 101** or consent of the instructor.

CROSS LISTINGS

Anthropology

§237. Relations of Power in India and China. Spring 1992.

Ms. DICKEY.

(See **Anthropology 237**, page 246.)

Classics

12. First-year Seminar: Family and *Familia* in Classical Rome.

Fall 1990. Ms. BOYD.

(See **Classics 12**, page 127.)

[311. Women in Antiquity.]

Economics

217. Economics of Population. Fall 1990. Ms. CONNELLY.

Prerequisite: **Economics 101** and **102**.

(See **Economics 217**, page 138.)

301. The Economics of the Family. Spring 1992. Ms. CONNELLY.

(See **Economics 301**, page 139.)

English

11. **First-year Seminar: Reading Women.** Fall 1990. MS. DIEHL.
(See **English 11**, page 144.)
16. **First-year Seminar: Representation and Gender.** Fall 1990.
MS. SUDAN.
(See **English 16**, page 145.)
23. **First-year Seminar: Sex, Politics, and the Novel.** Spring 1991.
MR. LITVAK.
(See **English 23**, page 145.)
26. **First-year Seminar: The Politics of Sexuality.** Spring 1991.
MS. SUDAN.
(See **English 26**, page 146.)
251. **The Romantic Novel.** Every other year. Fall 1991. MR. COLLINGS.
(See **English 251**, page 150.)
252. **The Victorian Novel.** Every other year. Spring 1992. MR. LITVAK.
(See **English 252**, page 150.)
261. **Twentieth-Century British Fiction.** Every other year.
Spring 1991. MS. REIZBAUM.
(See **English 261**, page 151.)
271. **American Literature 1860–1917.** Every other year. Spring 1991.
MS. GOODRIDGE.
(See **English 271**, page 151.)
- [§275. **African-American Fiction.**]
- [§276. **African-American Poetry.**]
280. **Women Writers in English.** Every other year. Spring 1991.
MS. DIEHL.
(See **English 280**, page 152.)
281. **Forms of Narrative.** Fall 1990. MR. LITVAK.
(See **English 281**, page 152.)
300. **Literary Theory.** Every other year. Fall 1991. MR. LITVAK.
(See **English 300**, page 152.)
328. **Clarissa.** Fall 1990. MS. KIBBIE.
(See **English 328**, page 152.)
332. **Feminist Literary Theory.** Spring 1991. MS. DIEHL.
Prerequisite: Consent of the instructor.
(See **English 332**, page 153.)

German

- 317. German Literature since 1945.** Fall 1990. MS. O'CONNOR.
Prerequisite: **German 204** or equivalent.
(See **German 317**, page 166.)

History

- 11. First-year Seminar: Women in Britain and America, 1750–1920.**
Fall 1991. MS. McMAHON.
(See **History 11**, page 176.)
- 246. Women in American History, 1600–1900.** Fall 1990.
MS. McMAHON.
(See **History 246**, page 182.)
- 247. American Women in the Twentieth Century.** Spring 1991.
MS. MAY.
(See **History 247**, page 182.)
- 248. Family and Community in American History.** Spring 1993.
MS. McMAHON.
(See **History 248**, page 182.)
- [**249. America's Working Women.**]
- §266. The African Poor.** Fall 1990. MR. KILLION.
(See **History 266**, page 184.)
- 331. A History of Women's Voices in America.** Spring 1992.
MS. McMAHON.
Prerequisite: **History 246, 247, or 248**, or consent of the instructor
(See **History 331**, page 187.)

Psychobiology

- 50. Mind and Brain: Historical and Contemporary Issues.** Every other year. Fall 1990. MR. ROSE.
(See **Psychobiology 50**, page 221.)

Romance Languages

- 11. Silence and Voices of Latin American Women.** Spring 1991.
MS. JAFFE.
(See **Romance Languages 11**, page 229.)

Russian

- 222. Women in Russian Society and Culture.** Fall 1990. Ms. KNOX
(See **Russian 222**, page 237.)

Sociology

- 203. Families in American Society.** Spring 1991. Ms. BELL.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.
(See **Sociology 203**, page 239.)
- 219. Sociology of Gender Roles.** Fall 1990. Ms. PHILLIPS.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.
(See **Sociology 219**, page 242.)
- 251. Sociology of Health and Illness.** Fall 1990. Ms. BELL.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.
(See **Sociology 251**, page 242.)

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. Bowdoin's Nathaniel Hawthorne-Henry Wadsworth Longfellow Library is exceptionally strong in its reputation as a college library. Totaling more than 760,000 volumes, its collections have been built up over a period of more than 195 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. Its present full-time staff includes thirteen professional librarians and nineteen library assistants.

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. It 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 760,000 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 18,000 volumes, and the annual expenditure per student is more than \$1,150.

The Hawthorne-Longfellow Library building was opened in the fall of 1965. The library occupies 60,000 square feet of its floor space and will eventually incorporate the 26,000 square feet presently used for the College's administrative offices. An expansion project completed in 1984 provided more seating, additional open stack shelf space, and climate control for Special Collections. The library has seating for more than 575 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.

The entrance level of the building contains the portions of the library of most immediate use to its readers: the circulation desk, the card catalog, the reference desk, reference books and bibliographies, current newspapers, current periodicals, periodical indexes, and two large and handsome reading areas. Study stations are conveniently dispersed on this floor, as they are throughout the building.

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. Near this room are more newspapers and magazines for recreational reading. Also on this floor are two suites of ten faculty studies each and small rooms for student typing or group study. The rest of this floor is shelving surrounded by carrels.

More shelving and carrels occupy the principal portion of the third floor. There are nine additional faculty studies on this floor. The eastern end of the third floor is the Special Collections Suite. This includes, in addition to shelf space in a climate-controlled area for Bowdoin's rare books and manuscripts and space for their use, a conference room, and a staff and faculty lounge.

The collections of the library are strong (thought inevitably of varying strength) in all areas covered by the curriculum of the College, and a constant effort is maintained to see 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 Cortesaço's *Portugaliae Monumenta Cartographia*, the elephant-folio 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 freely open to use by qualified scholars and are extensively used in introducing undergraduates—in their research projects and other independent work—to the variety of research materials regularly used in the scholarly world that they can expect to use if they continue into university 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 extraordinarily handsome 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.

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 8:30 A.M. to 5:00 P.M., Monday through Friday. Small departmental collections in art, biology, chemistry, mathematics, and music are housed contiguous to the offices of the departments and are available for use on separate schedules of opening.

A new science library, now under construction, is expected to open for the 1991 spring term. The building will have the capacity for shelving 70,000 volumes, accommodating readers at 120 study stations, six faculty studies, and office and work areas for staff in 14,000 square feet on three levels. It will house all of the College's science-related materials. The science library will offer the full range of library services, and its collections will be available on the same schedule as the Hawthorne-Longfellow Library.

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.

Bowdoin College issues a separate publication honoring those in whose names scholarships and books funds have been donated.

Bowdoin College Museums

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 collegiate art collections formed in the United States. Bowdoin's gift consisted of two portfolios containing 141 old master drawings, among which was a superb landscape by Pieter Bruegel the Elder, and 70 paintings, which remained with his widow until her death in 1813. A group of Bowdoin family portraits was bequeathed in 1826 by 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. A complete catalogue of this collection, *Colonial and Federal Portraits at Bowdoin College*, was published in 1966.

The College's collection of ancient art contains sculpture, vases, bronzes, gems, coins, and glass of all phases of the ancient world. The most notable benefactor in this area was Edward Perry Warren h '26, the leading 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, the gift to the College of Henri Byron Haskell m 1855, are installed in the museum's rotunda. *Ancient Art in Bowdoin College*, a descriptive catalogue of these holdings, was published in 1964.

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 h '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 his 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 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 gifts 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 Tworokov, Arshile Gorky, Franz Kline, Andrew Wyeth h '70, Leonard Baskin, and Alex Katz.

In 1982, the museum published a *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 the spring of 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. Among the important shows organized by the museum in recent years have been *Treasures from Near Eastern Looms*; *Winslow Homer Watercolors*; *Old Master Drawings at Bowdoin College*; *Alex Katz: Small Paintings*; *Yvonne Jacquette: Tokyo Nightviews*; *Makers '86* (a juried biennial exhibition of Maine crafts); *Twilight of Arcadia: American Landscape Painters in Rome 1830-1880*; *New England Now: Contemporary Art from Six States*; and *Thomas Cornell Paintings: The Birth of Nature*.

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 symposia and special lectures. Since 1973, symposia on American furniture, nineteenth-century decorative arts, American Indian art, nineteenth-century American architects, conservation of art, oriental rugs, American pewter, and American collegiate architecture have been held.

In 1985, the Associates Program merged with other special campus support groups to become the Association of Bowdoin Friends. This organization shares even more effectively the resources of the museum and campus with the

community beyond the College. 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. 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, established in 1967, is located on the first floor of Hubbard Hall, for many years the Bowdoin College Library. 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 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 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.

Language Media Center

THE LANGUAGE MEDIA CENTER, formerly the Film, Video, and Language Laboratories, was renovated in the summer of 1985 with the help of a gift from the Pew Memorial Trust. Located in the basement of Sills Hall, the center supports the study of foreign languages by providing a fourteen-station Tandberg audio-active language laboratory, twelve individual viewing stations for VHS, Beta, and 3/4-inch videocassettes (European and American standards), a short-wave receiving station, a videodisc viewing station, and eight Macintosh micro-computer 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 an 11-foot domestic satellite dish reception system located on the roof of Morrell Gymnasium. Students are able to watch live French, Spanish, and Italian-language television on the C and KU bands from this system. A 16-foot international reception system, located on the roof of Sills Hall, enables students to watch live programming from the Soviet Union, Eastern Europe, South America, and the Middle East.

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 A-V materials, and display of popular foreign-language newspapers and periodicals. Installation of a new video projection system in Smith Auditorium was completed in the spring of 1986.

Performing Arts

DRAMA

THE DIVISION OF THEATER within the Department of Theater Arts consists of 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 and directing are taught by the director of theater. Lighting is taught by the technical director. Each year at least three major productions are produced by the Masque and Gown on the stage of Pickard Theater. For many years, one production each season has been a musical. In March 1990, *Oklahoma* was presented to capacity houses. One very popular production each year is usually a Shakespeare drama or classical play. In the fall of 1989, Sheridan's *School for Scandal* was presented. 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. The 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 over fifty years, the 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 within 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 a major spring performance of student and faculty works in Pickard Theater. Students also perform annually at Parents Weekend in the fall and in the Museum of Art in May, in addition to presenting informal studio shows. Performances are linked to participation in technique, repertory, and choreography classes, held in the Dance Studio at Sargent Gymnasium.

The Division of Dance offers a comprehensive academic curriculum, including courses in dance history, theory, criticism, and choreography taught by the director of dance. Performance studies courses, on an academic or co-curricular basis, are taught by the director and visiting dance professionals.

The foundation for performance studies classes in dance technique and repertory is modern dance, a term designating a wide spectrum of styles that may include aspects of ballet or jazz. The program focuses principally on an inventive, unrestricted approach to movement. Modern dance offers an appropriate format in which to explore the general nature of dance and the creative potential of undergraduates at a small liberal arts college. Classes in ballet and jazz are also offered on a co-curricular basis.

Since 1973, the Division of Dance (then the Dance Program), often as part of the Bates-Bowdoin-Colby Dance Alliance, has invited nationally known dance companies, choreographers, and critics to the campus for teaching residencies and performances. A partial list includes Meredith Monk, Douglas Dunn, Pauline Koner, Kei Takei, Pilobolus, Wendy Perron, Dana Reitz, Phoebe Neville, Impulse Dance Company, Sukanya, The Court Dance Company of New York, Susan Foster, the Copasetics, Art Bridgman and Myrna Packer, Doug Varone, Johanna Boyce, Richard Ball, and Coleman Freedman, and critics Laura Shapiro, Marcia B. Siegel, and Jill Johnston. These performers teach master classes and offer lecture/demonstrations as part of their visits to campus. During the fall of 1990, New York performance artist Dan Hurlin will be in residence to teach two courses, with support from Mellon Foundation funds for curriculum enrichment.

MUSIC

Music performance at Bowdoin ranges from informal 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, College Community Orchestra, College Chorale, 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, and New Orleans. The Bowdoin College Chorale is a larger choral ensemble composed of students, faculty, staff, and community members. Recent performances by the Chorale include Brahms's *Liebesslieder Waltzes*, J. S. Bach's *Easter Oratorio*, and Fauré's *Requiem*.

The College Community Orchestra is an auditioned ensemble also drawn from the community at large. Its performances include works from the standard repertoire, such as Mozart and Schubert symphonies, as well as interesting, lesser

known works and premiers of new compositions. The orchestra features winners of an annual concerto competition each spring. 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 jazz.

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 Hilliard Ensemble, *Musica Antiqua Köln*, and Igor Kipnis.

Contemporary music is supported by a recently updated electronic music studio, frequent visits by guest composers such as Otto Luening, George Crumb, and Thea Musgrave, and a biennial festival of contemporary choral music. Student compositions are also 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 an American opera.

Other visiting artists in recent years have included the Los Angeles Piano Quartet, Joan Morris and William Bolcom, the Chinese Music Ensemble of New York, the Lydian String Quartet, and Kurt Ollman. 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.

Department of 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. Junior varsity or freshman teams are maintained in intercollegiate sports whenever possible.

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, box lacrosse, touch football, ultimate frisbee, hockey, outdoor soccer, softball, and indoor and outdoor volleyball. 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.

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 75 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. The new athletic facility, including a field house and pool, is attached to Pickard Field House.

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; adequate 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 F. 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 Life and Activities

BOWDOIN PROVIDES for its students a campus life that combines traditional features of the liberal arts college with modern facilities and programs to enrich the experience of undergraduate life. The curriculum offers formal instruction in those subjects appropriate to the development of educated and enlightened citizens. Within this framework, students are encouraged and are permitted sufficient flexibility 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, student union, health center, and athletic facilities, continuing attention is given to the less tangible—but more important—intellectual resources of the College. Art shows, lectures, concerts, films, and dramatic productions all enrich the student's work within the formal curriculum.

Honor System: Initiated by students, the Honor System places complete responsibility upon 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 Honor System. In so doing, students pledge to neither give nor receive unacknowledged aid in any academic undertaking. In the event that students witness a violation of the Honor System, they are obligated to take action consistent with their own sense of honor. The task of instructing students about their responsibilities under the Honor System resides with the Student Judiciary Board, a five-member body that also conducts hearings and recommends action to the dean in the event of a reported violation. Although currently under review by the Student Executive Board, the provisions and administration of the Honor System and other explanatory information are published in the *Bowdoin College Student Handbook*.

Board members for 1990-91 are Mitchell S. Zuklie '91, *Chair*; Sara B. Gagne '91, *Vice Chair*; Thomas R. Johansson '91, Eben A. Adams '92, and Deborah A. Levine '92. *Alternates:* Christopher W. Pyne '92, Matthew T. Schechter '91.

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. This unique code of conduct resulted from the cooperative efforts of faculty and students, and it governs undergraduate behavior at the College.

As with the Honor Code, students must subscribe to the Social Code at registration. The code clearly 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 this Social Code may be brought to the attention of the dean of students and to the Student Judiciary Board. Specific provisions and administration of the Social Code are found in the *Student Handbook*.

Living and Dining Accommodations: The College provides living and dining accommodations for its students. First-year students must reside in college-owned facilities. Most students dine at Moulton Union or Wentworth Hall. Those electing to join coeducational fraternities may take their meals at the fraternity house. 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 are not required to take a regular board contract. The fraternity chapter houses furnish dining accommodations for their members and living accommodations for some of their sophomore, junior, and senior members.

Moulton Union: The Union serves as the community center for the College.

The Main Lounge is arranged for informal use as well as college gatherings: lectures, recitals, receptions, and banquets. The Lancaster Lounge, in the wing opposite the Main Lounge, and a smaller lounge add flexibility to the main floor area. Also on this floor are the information desk and the offices of the director of the Union, the director of events, the student activities coordinator, the advisor to fraternities, and the campus scheduling supervisor.

A large, self-service bookstore, which features a broad selection of paperbacks, is located in the southeast corner on the main floor and supplies textbooks and sundries to members of the College.

Extracurricular organizations such as the Student Executive Board, Student Union Committee, the Camera Club, and WBOR have headquarters in the Union. The Office of Career Services is on the second floor of the building.

On the lower floor, food service is provided in a variety of dining rooms, one of which serves as a banquet room for groups of less than one hundred. The Bear Necessity, opened in 1981, provides an informal gathering place for members of the college community. A light menu and entertainment are available. Also on this floor are a game room, a mail room, an office of Hewins Travel Agency, and an automated bank-teller machine.

The formulation of policies and the planning of the many-sided program of activities are the responsibility of the student activities coordinator and the Student Union Committee. By sponsoring concerts, art exhibitions, tournaments, and other entertainment, the committee contributes to the social life of the entire college community.

Coeducational Fraternities: Approximately 40 percent of all Bowdoin students join one of the coeducational fraternities at some time in their career at the College. Local membership is open to all undergraduates, although some

national fraternities do not recognize women as members. The Governing Boards have mandated that, by September 1991, all fraternities recognized by Bowdoin must be open to all men and women on a fully equal basis. About one-third of the junior and senior fraternity members normally live in the fraternity houses, most of which are located adjacent to the campus and are independently owned and operated by alumni house corporations. Most other members live in College housing but frequently eat meals in their fraternity dining rooms. All Bowdoin social and safety regulations apply to fraternity members.

For their members, fraternities are an important part of college life, providing a focus for social activities. In addition, fraternity members enjoy many benefits derived from the sharing of educational concerns and daily living experiences within the organizations. Membership affords students an opportunity to assume significant responsibilities in self-governance within the fraternity organizations and offers exposure to the history and traditions of the fraternities and the College.

Student Executive Board: Student social life at Bowdoin, the operation of student organizations, and the canvassing of student opinion to advise faculty and administrators on issues of general campus concern are entrusted to student governance. Undergraduate self-government is vested in the Student Executive Board, which makes recommendations about student affairs to the student body and to the faculty. In addition, the Student Executive Board participates in the broader governance of the campus through representatives chosen by the board to be members of the various committees of the faculty and the Governing Boards.

Student Judiciary Board: The Student Judiciary Board is responsible for adjudicating misconduct through the enforcement of the Honor System and the Social Code. The board conducts administrative hearings on suspected misconduct and presents its findings to the dean of students in the form of recommendations. The board comprises three seniors and two juniors, all selected by the Student Judiciary Board with the approval of the Student Executive Board.

Student Representatives to Committees of the Faculty and Governing Boards: Most of the committees of the faculty and Governing Boards have invited student representatives to be voting members and to sit with them in their deliberations. This representation has facilitated the exchange of information and points of view between the various constituencies of the College.

Board of Proctors: Proctors play an integral role in residential life at Bowdoin. The proctor is generally responsible for creating and maintaining a living environment in the residence halls and houses that is conducive to the academic success and physical, social, and emotional well-being of the students. The proctors are selected and supervised by the assistant dean of students.

Organizations

African-American Society: The African-American Society, formed in 1968, was created to preserve, establish, and promote the African-American heritage within the Bowdoin community. Educational, cultural, and social activities are generally focused on the special experiences of African Americans. Membership is available to all students who share similar interests. The general public is invited to participate in the African-American Society's varied activities throughout the year. In cooperation with student and faculty groups, the society has regularly sponsored educational programs, cultural expressions, and general entertainment for the benefit of the entire community. The society is instrumental in the recruitment of African American students and assists new students in making the adjustment to college life.

Alcohol Peer Advisers: The Alcohol Peer Advisers are specially trained students who have been given accurate information about alcohol and its effects on fellow students, friends, and family. APAs are willing to listen to fellow students and can act as a referral link to other resources available on campus and in the community. APAs have also developed an outreach program with the goal of educating the Bowdoin community about alcohol-related issues.

Amnesty International: Amnesty International is a campus chapter of the Nobel Prize-winning human rights organization. In addition to working for the release of prisoners of conscience, the group is concerned with promoting human rights education throughout the campus.

Art Klub: This organization sponsors a variety of events focused on art, including films, lectures, museum trips, and discussions.

Asian Interest Group: The purpose of the group is to deal with Asian issues that arise in the Bowdoin College community. The group works closely with the various offices of the administration to discuss admissions, student life, and curriculum policies; to help students adjust to college life; and to promote Asian-American awareness.

B-GLAD (Bisexual, Gay, Lesbian Alliance for Diversity): The group provides an avenue for the discussion of relationships, families, love, and sexuality, and establishes a social and political support network for non-heterosexual participants. The alliance presents a number of films and lectures each year.

Bowdoin Active in Community Service (BACS): Bowdoin students participate in a wide range of social service activities on a voluntary basis. Students participating in these community service activities receive no compensation or academic credit. Each of the major programs is coordinated by a student leader, and the smaller or individual activities are organized by the voluntary service programs coordinator.

Currently these activities include the Big Brother-Big Sister program, which provides companionship and activities for children of elementary and junior high

school age; a program of assistance to area retarded citizens; programs that seek to help the elderly and infirm in the region; the Regional Hospital Program for those considering careers in medicine; a school tutoring program; Bowdoin Undergraduate Teachers, which is of particular interest to those interested in a teaching career since it provides opportunities for direct participation in local school classrooms; the Bath Children's Home Program, in which students offer friendship and academic assistance to youngsters living in a group home; Project BASE (Bowdoin and Sweetser exchange), which offers an opportunity to work with emotionally disturbed children at a residential school; and the Maine Volunteer Lawyers Project, in which trained students offer preliminary legal information to low-income Portland-area residents.

Bowdoin Dance Group: The group sponsors visiting performers, gives informal concerts or lecture/demonstrations, and presents a major spring performance of student work.

Bowdoin Film and Video Society: The BFVS sponsors films throughout the school year. Some of the box office proceeds are used to buy films for the permanent collection.

Bowdoin Literary Society: The group sponsors lectures, poetry readings, and other events centered around literature.

Bowdoin Review: The *Bowdoin Review* is a student essay magazine published twice in the academic year. Essays on any subject will be considered for publication.

Bowdoin Rugby Football Club: The club sponsors rugby matches with teams from other colleges and independent teams.

Bowdoin Women's Association: The BWA sponsors lectures on topics of interest to the entire College community as well as informal gatherings where Bowdoin women can get to know one another and discuss their college experiences. The BWA has an office in the Women's Resource Center at 24 College Street.

Bugle: The *Bugle* is the college yearbook.

Camera Club: This informal organization provides activities and collaboration for Bowdoin's many student photographers.

Chapel Talks Program: Organized and directed by students, the program offers an opportunity for members of the community to meet weekly in the Chapel to contemplate and question talks delivered on a wide variety of topics.

College Republicans: This is a conservative political organization open to students of any and all party affiliations. The group sponsors speakers, has social activities, and publishes the *Patriot*.

Croquet at Bowdoin: This coed group not only plays croquet but fosters

discussion of the sport.

Druids: An environmental organization whose goal is to raise awareness and promote action on local and global environmental issues. The group has weekly meetings and sponsors lectures and films. Members are involved in the campus recycling program and other conservation efforts.

Interfraternity Council: The presidents of the fraternities meet regularly to discuss common issues and to review ways in which fraternities at Bowdoin may contribute more effectively to undergraduate life.

International Club: The club sponsors a broad range of intercultural events, including dances, lectures, and dinners, and helps facilitate exchange between students of varying backgrounds with international interests.

Kamerling Society: Named in honor of the late Samuel E. Kamerling, Charles Weston Pickard Professor of Chemistry, the society is Bowdoin's student chapter affiliated with the American Chemical Society. The society sponsors lectures, films, and seminars for the college community.

Masque and Gown: This college dramatic organization has for more than eighty seasons provided undergraduates with opportunities to give practical expression to their interest in the theater. The Executive Committee produces full-length and one-act plays and sponsors the annual student-written one-act play contest; the committee also uses various experimental production techniques. Under the direction of the director of theater and housed in Pickard Theater, the Masque and Gown offers many opportunities for those interested in playwriting, scene design and construction, acting, business management, and publicity.

Music: Music activities include the Meddiebempsters, a men's augmented double quartet; the Miscellania, a women's augmented double quartet; the What Four, a barbershop quartet; the Bowdoin Jazz Ensemble; the Wind Ensemble; the Chamber Choir; the Chorale; the Bowdoin Precision Marching Band; and the Community Orchestra.

Orient: *The Bowdoin Orient*, the College newspaper, is now in its 118th year of continuous publication. There are opportunities for first-year students as reporters and for newcomers at the news desk, and advancement on the staff is rapid for those with a flair for journalism. Students interested in the business management of the newspaper will also find opportunities for work and advancement. The club also provides leadership training workshops for members of the College community.

Outing Club: Organized in 1948, the Outing Club sponsors a program of outdoor activities including rock climbing, hiking, cycling, canoeing, and skiing.

Paracelsus Society: The organization is a biological and natural science society that presents lectures, seminars, and films.

Peer Counselors: The members of this group deal with such community issues and concerns as racism, sexism, and homophobia.

Peer Relations Support Group (PRSG): The members of this group have been trained in the issues surrounding sexual harassment and interpersonal relationships. PRSG's purpose is to encourage healthy relationships, interpersonal communication, and consideration among members of the Bowdoin community. The members organize events that promote campus awareness and are also available to provide information, one-on-one peer counseling, or crisis intervention.

Quill: The *Quill* is the college literary publication and is normally published once each semester. Each issue contains short stories, essays, poems, and reviews. Contributions are welcomed from all members of the College.

Radio: In WBOR, "Bowdoin-on-Radio," the College has a well-equipped FM radio station as the result of a gift from the Class of 1924. Situated on the second floor of the Moulton Union, the student-operated station broadcasts daily when the College is in session. Positions as announcers, engineers, newscasters, and sportscasters are numerous and open to any student.

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. Each has planned activities appropriate to its membership.

Russian Club: The club sponsors concerts of Russian music and showings of Soviet films, holds Russian dinners, and leads discussions of current affairs involving the USSR, in its efforts to promote Russian and East European culture on the Bowdoin campus.

Struggle and Change: The goal of this political organization is to raise issues on campus about society at large. Such issues include nuclear power and apartheid. The group sponsors speakers, has weekly discussions, and publishes *To the Root*, an alternative political newspaper.

Student Union Committee: This group is a committee of elected members that organizes, coordinates, and sponsors a number of campus-wide social activities including lectures, dances, parties, and concerts.

Thymes: The *Bowdoin Thymes* is the daily newspaper/calendar of the College. It is a publication of the Office of Public Relations and Publications and employs two or three undergraduates as coeditors. Each weekday, the *Thymes* is printed and delivered to residence halls, fraternities, and other buildings on campus.

Young Democrats: The group is a partisan organization that welcomes people from all parts of the political spectrum to participate. The group's goal is to promote political awareness on campus by sponsoring speakers and debates.

Career Services

THE OFFICE OF CAREER SERVICES (OCS) complements the academic mission of the College. Career counselors strive to increase students' awareness of the skills they are developing through a liberal arts education and to highlight the applicability of these skills to a wide range of career options.

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 deal with later career and life 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. A fall Career Exploration Day and presentations throughout the year on specific career fields are designed to broaden students' awareness of their options and to enhance their understanding of the job market. Information and advisement is offered regarding graduate study as well. In counseling style and program content, OCS addresses the needs of those with diverse interests, attitudes, and expectations.

Alumni/ae and parents volunteer to share their insights and expertise in informational programs both on and off campus. A computerized network allows the OCS staff to refer those seeking advice on specific career fields or geographic areas to alumni/ae and parents in the professions and locations of interest.

Each year, more than 50 companies, 60 graduate schools, and an increasing number of secondary schools and nonprofit employers participate in on-campus recruiting programs. Bowdoin is also a member of interviewing consortia in Maine, Boston, and New York City.

Career Services continually updates two resource centers, located in the Moulton Union and in the Department of Education, which house general career guidance literature and materials on specific careers, companies, organizations, and graduate schools. More than a dozen periodicals list current job opportunities, and information is available on over 1,000 summer and semester internships. A weekly newsletter publicizes all OCS events and programs in addition to internship and job openings.

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): Established by Mrs. John Warren Achorn as a memorial to her husband, a member of the Class of 1879. The income is used for lectures on birds and bird life.

Charles F. Adams Lectureship (1978): Established by the bequest of Charles F. Adams of the Class of 1912. To support a lectureship in political science and education.

Albert C. Boothby Memorial Fund (1977): Established by the family and friends of Albert C. Boothby of the Class of 1929. Terms to be established.

Chemistry Lecture Fund (1939): Established by a vote of the Governing Boards. For Department of Chemistry special lectures in chemistry.

Dan E. Christie Mathematics Lecture Fund (1976): Established by family, friends, colleagues, and former students in memory of Dan E. Christie of the Class of 1937, a member of the faculty for thirty-three years and Wing Professor of Mathematics from 1965 until his death in 1975. To sponsor lectures under the auspices of the Department of Mathematics.

Annie Talbot Cole Lectureship (1907): Established by Mrs. Calista S. Mayhew in memory of her niece, Mrs. Samuel Valentine Cole. To contribute "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."

The 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. To support 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 of the Class of 1956 in memory of his father. To provide 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, Ph.D., a member of the faculty for thirty-nine years and Wing Professor of Mathematics Emeritus since his retirement in 1964. To provide lectures under the sponsorship of the Department of Mathematics.

Mayhew Lecture Fund (1923): Established by Mrs. Calista S. Mayhew. To provide lectures on bird life and its effect on forestry.

Charles Weston Pickard Lecture Fund (1961): Established by John Coleman of the Class of 1922, in memory of his grandfather, a member of the Class of 1857. Beginning with the academic year 1963-64, and every four years thereafter, the income 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 of the Class of 1973. 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 non-conventional approaches to the designated topic in the specified category.

Edith Lansing Koon Sills Lecture Fund (1962): 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 Rosalynne Spindel Bernstein and Sumner Thurman Bernstein in memory of her father, Harry Spindel, as a lasting testimony to his lifelong devotion to Jewish learning. 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 of the Class of 1909. "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, an honorary graduate in 1935, as a memorial to the Bowdoin members of his family. For a series of lectures to be delivered by persons 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.

Prizes and Distinctions

THE BOWDOIN PRIZE: A fund established as a memorial to William John Curtis, LL.D., of the Class of 1875, 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. Recipient of the award in 1985 was Joan Benoit Samuelson, A.B., of the Class of 1979. Joint recipients of the award in 1990 were Professors Dana W. Mayo and Samuel S. Butcher.

THE PRESERVATION OF FREEDOM FUND: A fund established by Gordon S. Hargraves of the Class of 1919 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, a member of the faculty, or a 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. Recipients of the award in 1989 were United States Senators William S. Cohen '62 and George J. Mitchell, Jr. '54. The recipient of the award in 1990 was Thomas R. Pickering '53.

UNDERGRADUATE PRIZES

Prizes in General Scholarship

Brooks-Nixon Prize Fund: A fund established by Percy Willis Brooks, of the Class of 1890, and Mary Marshall Brooks. The annual income is awarded each year as a prize to the best Bowdoin candidate for selection as a Rhodes scholar. (1975)

Brown Memorial Scholarships: A fund for the support of four scholarships in Bowdoin College given by the Honorable J. B. Brown, of Portland, in memory of his son, James Olcott Brown, A.M., of the Class of 1856. 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: An award from the estate of Dorothy Haythorn Collins and from her family to the Society of Bowdoin Women. Each year the society selects a department from the sciences, the social studies, and the 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, of the Class of 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: A fund bequeathed by Almira L. McArthur, of Saco, in memory of her husband, George Wood McArthur, of the Class of 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)

Leonard A. Pierce Memorial Prize: A prize, established by friends and associates. It 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, LL.D., of the Class of 1870, this fund furnishes two prizes for excellence in select declamation. (1908)

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, D.D., of the Class of 1832, the prize is awarded for a written or oral presentation at Commencement. (1882)

Departmental Prizes

AFRO-AMERICAN STUDIES

Lennox Foundation Book Prize: This fund was established by the Lennox Foundation and Jeffrey C. Norris of the Class of 1986. An appropriate book is awarded to a student graduating in Afro-American Studies.

ART

Art History Junior-Year Prize: A prize funded annually by a donor wishing to remain anonymous and 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: A prize established by a donor wishing to remain anonymous and 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: The annual income of a fund for demonstrations of excellence in art history and creative visual arts by two students enrolled as majors in the Department of Art. The fund was established by her husband, Henry Lewis, and her children, William H. Hannaford, David Hannaford, and Anne D. Hannaford. (1981)

BIOLOGY

Copeland-Gross Biology Prize: A prize named in honor of two former Josiah Little Professors of Natural Science, Manton Copeland and Alfred Otto Gross, Sc.D., 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: A fund 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, M.D. '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: The income of a fund given by former students and other friends in honor of the 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: A prize in memory of Professor Philip Weston Meserve, of the Class of 1911, "to be used preferably to stimulate interest in Chemistry." (1941)

CLASSICS

Hannibal Hamlin Emery Latin Prize: A prize is awarded to a member of the

junior or senior class for proficiency in Latin. (1922)

Nathan Goold Prize: A prize established by Abba Goold Woolson, of Portland, in memory of her grandfather. It 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: A prize given by Jotham Bradbury Sewall, S.T.D., of the Class of 1848, 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: A prize 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: A prize established by Crosby Stuart Noyes, A.M. (Bowdoin, 1887), 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, A.M., of the Class of 1877, in memory of Philip Henry Brown, Esq., A.M., of the Class of 1851, 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, of the Class of 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, Litt.D., of the Class of 1915, Pierce Professor of Literature, and in memory of the original founders of the Hawthorne Prize: Nora Archibald Smith and Kate Douglas Wiggin, Litt.D. It 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)

Horace Lord Piper Prize: A prize established by Sumner Increase Kimball, Sc.D., of the Class of 1855, in memory of Major Horace Lord Piper, of the Class of 1863. It 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, of the Class of 1867, is awarded to the two outstanding students in

English freshman seminars. First and second prizes are awarded in a two-to-one ratio. (1919)

Poetry Prize: The annual income of a fund established by Raul d'Este Palmiere of the Class of 1926 is given each semester for the best poem written by an undergraduate. (1926)

Pray English Prize: A prize given by Thomas Jefferson Worcester Pray, M.D., of the Class of 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., of the Class of 1917, who lost his life in the service of his country, awarded to the undergraduate writing the best poem. (1919)

David Sewall Premium: A prize is awarded to a member of the freshman class for excellence in English composition. (1795)

Mary B. Sinkinson Short Story Prize: A prize established by John Hudson Sinkinson, of the Class of 1902, 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: A fund established from the bequest of Bertram Louis Smith, in memory of his son, a member of the Class of 1903, to encourage excellence of work in English literature. The annual income of this fund is awarded by the department to a member of the junior class who has completed two years' work in English literature. Ordinarily, it is awarded 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, Litt.D., of the Class of 1909, and by others, to be awarded to students who in the judgment of the department have profited especially from their instruction in German. The fund is 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 will receive a certificate of merit and a book prize in addition to a small financial prize which will be awarded from the income of the fund. The prize will be 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 juniors and 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, of the Class of 1954, 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, LL.D., of the Class of 1875, 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 of the Class of 1964, is awarded annually to that student who has achieved excellence in the study of European history. (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: The gift of Henry Jewett Furber, of the Class of 1861, named by him in honor of Professor William Smyth. A prize 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: A prize established by Mrs. Rebecca P. Bradley in memory of Mrs. Sue Winchell Burnett. It 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: A prize awarded to the most deserving student in the Department of Philosophy. The prize was given by Gerard L. Dube of the Class of 1955 in memory of his friend and classmate. (1984)

PHYSICS

Edwin Herbert Hall Physics Prize: A prize, named in honor of Edwin Herbert Hall, LL.D., of the Class of 1875, 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: A prize named in honor of Noel C. Little, Sc.D., of the Class of 1917, professor of physics, and Josiah Little Professor of Natural Science, to be awarded to a graduating senior who has distinguished himself or herself in experimental physics. (1968)

PSYCHOLOGY

Frederic Peter Amstutz Memorial Prize: A prize established by members of his family for a graduating senior who has achieved distinction as a psychology major. (1986)

RELIGION

Edgar Oakes Achorn Prize Fund: The income of a fund is distributed as a prize for the best essay by a member of the sophomore or freshman classes in Religion 101. (1932)

Lea Ruth Thumim Biblical Literature Prize: A prize given 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: A prize established by classmates and friends in memory of Philip C. Bradley, of the Class of 1966, is awarded to outstanding students in Spanish languages and literature. (1982)

Goodwin French Prize: A prize given by the Reverend Daniel Raynes Goodwin, D.D., of the Class of 1832, is awarded to the best scholar in French. (1890)

Eaton Leith French Prize: The annual income of a fund 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. The prize was established in 1962 and endowed in 1966 by James M. Fawcett III, of the Class of 1958, to honor Eaton Leith, professor of Romance languages emeritus. (1962)

Charles Harold Livingston Honors Prize in French: An award to encourage independent scholarship in the form of honors theses in French. The fund was established by former students of Charles Harold Livingston, Longfellow Professor of Romance Languages, upon the occasion of his retirement. (1956)

SCIENCE

Sumner Increase Kimball Prize: A prize established by Sumner Increase Kimball, Sc.D., of the Class of 1855, 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: A prize for an outstanding research project by a major in honor of Matilda White Riley h '72, the 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. (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: The income from a bequest of 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)

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 held by the winner until the following contest. (1937)

Masque and Gown One-Act Play Prizes: Cash prizes are awarded annually for excellence in various Masque and Gown activities, including playwriting, directing, and acting. (1934)

Alice Merrill Mitchell Prize: A prize given by Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, 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: A fund established in memory of Bill Moody, who for many years was the theater technician and friend of countless students. The award is presented annually, if applicable, to one or more upperclassmen having made outstanding contributions to the theater through technical achievements accomplished in good humor. The award should be an appropriate memento of Bowdoin. (1980)

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, the award is presented annually to one or more freshman 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)

Bowdoin Dance Group Award: An appropriate, inscribed dance memento to be 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. To be awarded to a freshman with demonstrated motivation and exceptional promise in dance technique or choreography, whose future work in dance, upon return, will enrich the Bowdoin program. (1988)

AWARDS IN ATHLETICS

Women's Basketball Alumnae Award: A bowl, inscribed with the recipient's name, 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)

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)

Society of Bowdoin Women Athletic Award: An award 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)

Leslie A. Claff Track Trophy: A trophy presented by Leslie A. Claff, of the Class of 1926, to be 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, of the Class of 1896, and mother of Nathan Dane II, of the Class of 1937, 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: A trophy presented to the College by friends and members of the family of Francis S. Dane, of the Class of 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: The William J. Fraser Basketball Trophy, presented by Harry G. Shulman, A.M. (Bowdoin, 1971), in memory of William J. Fraser, of the Class of 1954, 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: A trophy presented to the College by his friends in memory of Winslow R. Howland, of the Class of 1929, 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: A cup given by the Bowdoin chapter of Chi Psi Fraternity in memory of Elmer Longley Hutchinson, of the Class of 1935, 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: A trophy presented by the family and friends in honor and memory of J. Scott Kelnberger '83. (1985)

Samuel A. Ladd Tennis Trophy: A trophy presented by Samuel Appleton Ladd, Jr., of the Class of 1929, and Samuel Appleton Ladd III, of the Class of 1963, awarded to a member of the men's varsity team who during the year by his

sportsmanship, cooperative spirit, and character has done the most for tennis at Bowdoin. The award winner's name is to be inscribed on the trophy. (1969)

George Levine Memorial Soccer Trophy: A trophy presented by Lieutenant 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 track team who has distinguished herself through outstanding achievement and leadership during her four-year athletic career at Bowdoin. The recipient of the award is chosen by vote of the athletic director, the head track coach, and the Bowdoin women's track team. (1989)

Robert B. Miller Trophy: A 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: A trophy given by his family in memory of Hugh Munro, Jr., of the Class of 1941, who lost his life in the service of his country. It 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., 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)

Wallace C. Philoon Trophy: Given by Wallace Copeland Philoon, M.S., Major General, U.S.A., of the Class of 1905, 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)

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, of the Class of 1950, 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: A fund established in 1975 by William K. Simonton, of the Class of 1943, to be 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 the friends and family of Colonel Ed Ryan, longtime starter at the College track meets, this award is presented annually to a member of the women's track team who has demonstrated outstanding qualities of loyalty, sportsmanship, and character during her 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 will be 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. (Bowdoin, 1971), in honor of his wife, this trophy is awarded annually to the outstanding woman athlete. The recipient will be selected by the director of athletics and the dean of the College. (1975)

Paul Tiemer, Jr., Men's Lacrosse Trophy: Given by Paul Tiemer, of the Class of 1928, 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 to be selected by the varsity lacrosse coach, the director of athletics, and the dean of the College. (1976)

The Christopher Charles Watras Memorial Women's Ice Hockey Trophy: This trophy is dedicated in the memory of Chris Watras, of the Class of 1985 and 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 of ice hockey, as well as in the community and the classroom. The recipient will be selected by the women's varsity ice hockey coach and the director of athletics. The recipient will have her name engraved on the permanent trophy and receive a replica at the team's annual award ceremony. (1989)

David Berdan Wenigmann Memorial Wrestling Trophy: Given by Henry P. Bristol II, of the Class of 1976, in memory of his friend David Berdan Wenigmann, this trophy is awarded each year to the member of the varsity wrestling team who best exemplifies the qualities of character, courage, and enthusiasm for the sport of wrestling. The recipient is chosen by the dean of the College and the director of athletics, with the advice of the wrestling coach. (1984)

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 or her 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 and the cup retained for the following year by that College group (fraternity or non-fraternity) of which the recipient is a member. (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)

Paul Andrew Walker Prize Fund: Established in honor and memory of Paul Andrew Walker, of the Class of 1931, 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)

General R. H. Dunlap Prize: This fund was established by Katharine Wood Dunlap in memory of her husband, Robert H. Dunlap, Brigadier General, U.S.M.C. The annual income is to be awarded to the student who writes the best essay on the subject of "service." (1970)

Andrew Allison Haldane Cup: A cup given by fellow officers in the Pacific in memory of Captain Andrew Allison Haldane, USMCR, of the Class of 1941, awarded to a member of the senior class who has outstanding qualities of leadership and character. (1945)

Orren Chalmer Hormell Cup: A cup, given by the Sigma Nu Fraternity at the College, in honor of Orren Chalmer Hormell, Ph.D., D.C.L., DeAlva Stanwood Alexander Professor of Government, is awarded each year to a sophomore who, as a freshman, competed in freshman 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: A fund given by Lucien Howe, M.D., Sc.D., of the Class of 1870. Fifty percent of the income 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)

Col. William Henry Owen Premium: An award established by Frederick Wooster Owen, M.D., in memory of his brother, a member of the Class of 1851, is made at Commencement to some graduating student recognized by his or her fellow students as a "humble, earnest, and active Christian." (1916)

Franklin Delano Roosevelt Cup: A 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)

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 freshman year. This award was established by the Abraxas Society. (1915)

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.

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 Bradbury Debating Prize is awarded to the competitors for the student speaker at James Bowdoin Day exercises. The first prize is for the speaker; the second prize is divided among the other competitors.

The James Bowdoin Scholarships, carrying no stipend, are awarded to

undergraduates who have completed a minimum of two semesters' work. The scholarships are determined on the basis of a student's entire record at Bowdoin. To be named a James Bowdoin Scholar, a student must obtain three-quarters honor grades, including one-quarter high honor grades. A student must obtain two additional high honor grades to balance each grade of pass, in addition to the three-quarter honor grades.

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 high honors in each of his courses during the last academic year.

THE APPLIED ENVIRONMENTAL SCIENCE FUND

This fund was established in 1981 by gifts from Robert C. Porter of the Class of 1934, the Ivy Fund, Suburban Propane Gas Corporation, Marsh & McLennan Companies, Inc., and Eberstadt Asset Management, Inc. It is to be used to support the research and instructional program of the Marine Research Laboratory and the Hydrocarbon Research Center.

FACULTY DEVELOPMENT FUND

This fund was established by Charles Austin Cary, LL.D., of the Class of 1910. The income from the fund 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.

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. Fellow-

ships 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 man's 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 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, Ph.D., Sc.D., 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. Income from the fund may be used for such projects as research on Kent Island, travel to a given region or library for particular work, purchase of special apparatus, attendance at an ornithological congress or other scholarly gatherings, and publication of the results of research. Although the fund is administered by Bowdoin College, assistance from the fund is not limited to Bowdoin students.

Fritz C. A. Koelln Research Fund

This fund was established in 1972 by John A. Gibbons, Jr., of the Class of 1964, to honor Fritz C. A. Koelln, professor of German and George Taylor Files Professor of Modern Languages Emeritus, 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.

Research, Educational, 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 294). 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 3 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.

WCBB-TV

WCBB-TV is a public television station formed by Bates, Bowdoin, and Colby colleges in 1961. It is licensed to Colby-Bates-Bowdoin Educational Telecasting Corporation and serves southern Maine and eastern New Hampshire. At the time of its founding, it was the first noncommercial television station in Maine, the third in New England, and one of the earliest in the nation. It is supported primarily by contributions from viewers, an annual auction, and grants from business, industry, and foundations.

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 in each other." 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: D. Ellen Shuman '76, president; Helen E. Pelletier '81, vice president; Donald B. Snyder '50, secretary and treasurer.

Members-at-Large: *Terms expire in 1991:* Anthony P. Belmont '60, Robert E. Ives '69, Edward E. Langbein, Jr. '57, D. Ellen Shuman '76. *Terms expire in 1992:* Helen E. Pelletier '81, Arthur L. Perry '57, Glenn K. Richards '60, George F. T. Yancey, Jr. '68. *Terms expire in 1993:* Sally Clayton Caras '78, Bruce Locke '68, John M. Mackenzie '69, J. Ward Stackpole '50. *Term expires in 1994:* David M. Cohen '64, Molly Hoagland King '80, Gregory V. McQuater '72, Theodore C. Sandquist '59.

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, two members of the African-American Alumni Council, and three undergraduates.

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 1990 was Paul E. Gardent '39.

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 recipient in 1990 was Alfred H. Fuchs.

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 1990 were John W. Halperin '63 at the college/university level and, at the primary/secondary level, Richard Pike '67.

BOWDOIN MAGAZINE

Established in 1927, the quarterly *Bowdoin Magazine* publishes 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. The magazine is edited by Charles C. Calhoun. Other alumni publications include *Bowdoin Bearings*, *The Whispering Pines*, and various newsletters.

BOWDOIN ALUMNI SCHOOL AND INTERVIEWING COMMITTEES (BASIC)

BASIC is a volunteer association of approximately 500 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 again in 1983, has as its principal task the raising of unrestricted or currently expendable (budget-relieving) funds for current purposes. The past two years have seen the Fund setting dollar goals of \$3,000,000, with more than 60 percent of the alumni participating in the annual fund-raising effort.

Officers: Joan Benoit Samuelson '79, chair; I. Joel Abromson '60, vice chair.

Directors: Joan Benoit Samuelson '79 (term expires in 1991), I. Joel Abromson '60 (term expires in 1992), James W. MacAllen '66 (term expires in 1993), Gardner Cowles III '59 (term expires in 1994), Harry L. Silverman '64 (term expires in 1995).

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 1989 was the Class of 1957, David Z. Webster, 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 1989 was the Class of 1964, Harry L. Silverman, agent.

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 1989 was the Class of 1939, George L. Hill, agent.

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 1989 was the Class of 1979, Susan Williamson Peixotto and Peter F. Richardson, 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 '00.

The recipient in 1989 was the Class of 1979, Susan Williamson Peixotto and Peter F. Richardson, agents.

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 recipient in 1989 was the Class of 1954, Theo A. de Winter and Lawrence E. Dwight, agents.

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 1989 were the Class of 1964 and the Class of 1912.

SOCIETY OF BOWDOIN WOMEN

The Society of Bowdoin Women was formed in 1922. Its purpose is 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 has made specific gifts to the College, such as silver and china for the president's house. In 1961, it established the Edith Lansing Koon Sills Lecture Fund, honoring Mrs. Kenneth C. M. Sills, wife of a former president of the College. Proceeds from the Fund have been used to sponsor cultural and literary speakers. In 1971, following the decision to admit women undergraduates, the Society created a scholarship fund restricted to qualified women students. In 1978, the Society of Bowdoin Women Athletic Award was established to recognize effort, cooperation, and sportsmanship by a senior member of a women's varsity team. In 1983, the Society established the Frank F. Sabasteanski Polar Bear Run in honor of the longtime Bowdoin track coach. And in 1985, the Dorothy Haythorn Collins Award was created to honor a junior student of outstanding quality in his or her chosen field of study. Contributions have also been made to the Elisabeth Clark Wilder Scholarship Fund in memory of Mrs. Philip S. Wilder, a former president and longtime member of the Society. Funds have also been used to increase the scholarship endowment; to add to the Daggett Book Fund in memory of Mrs. Athern P. Daggett, the vice president-at-large at the time of her death; to purchase equipment for the Office of Career Services; and to co-sponsor the New York Contemporary Choreographers Series.

Membership is open to any interested person by the payment of annual dues of \$3. The programs and activities are made possible by the dues, contributions, and bequests.

Officers: Mrs. Joyce W. Rogers, president; Mrs. A. LeRoy (Polly) Greason, honorary president; Mrs. Anne-Marie Train, vice president; Mrs. Robert (Mary Scott) Brownell, secretary; Mrs. Kimberly Labbe Mills '82, treasurer; Mrs. Howard (Connie) Thorburn, assistant treasurer; Mrs. Debora H. Noone '87, activities coordinator; Mrs. Robert C. (Joan) Shepherd, membership; Mrs. Dana (Jeanne) Mayo, nominating; and Mrs. Olin M. (Wilma) Sawyer, past president.

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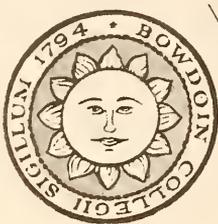
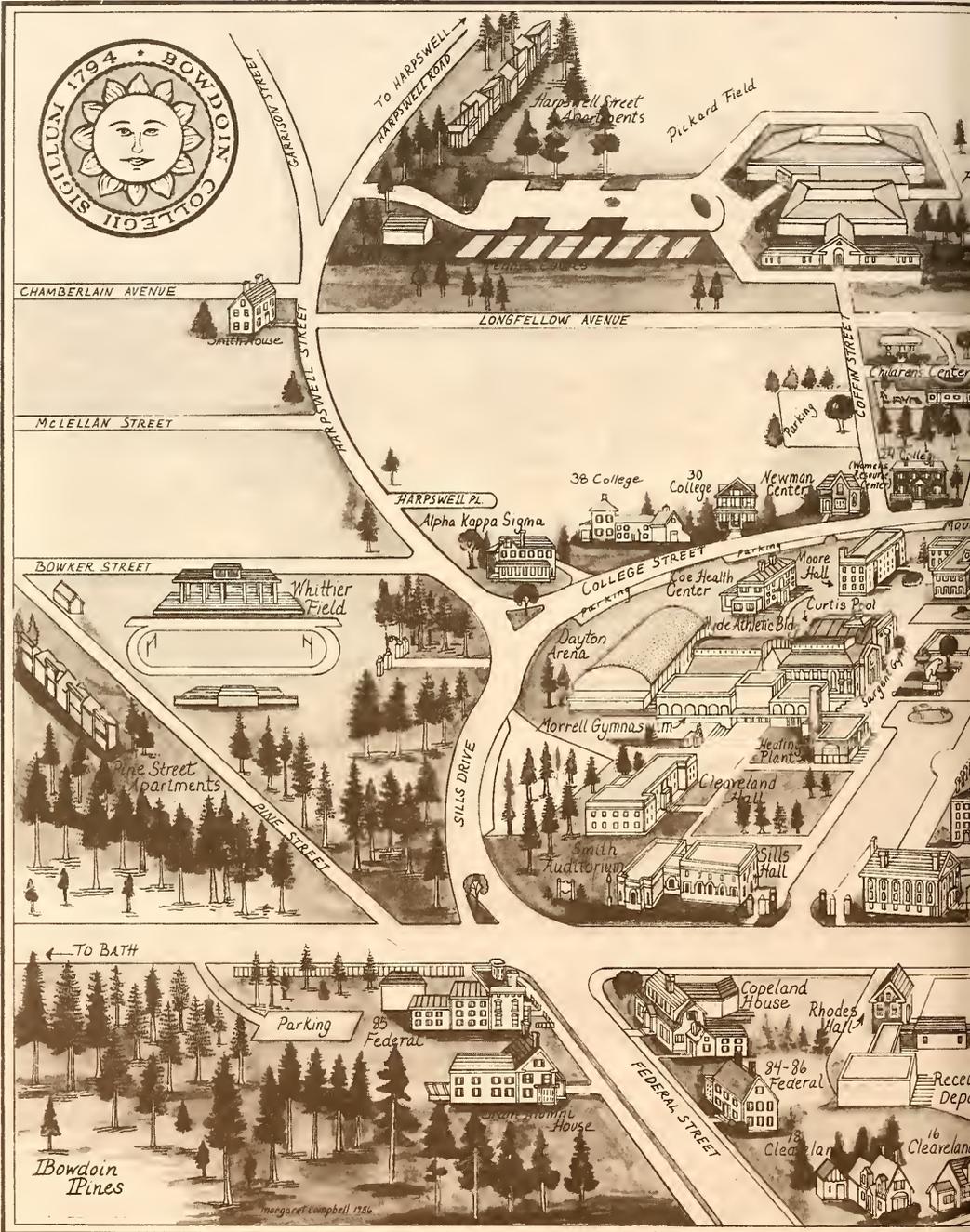
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Campus Map



CHAMBERLAIN AVENUE

MCLELLAN STREET

BOWKER STREET

HARPSWELL PL.

36 College

30 College

Newman Center

Alpha Kappa Sigma

COLLEGE STREET

SILLS DRIVE

Moore Hall

Joe Health Center

Curtis Pool

Dayton Arena

Morrell Gymnasium

Heald Plant

Cleveland Hall

Smith Auditorium

Sills Hall

← TO BATH

Parking

95 Federal

Street House

FEDERAL STREET

Copeland House

Rhodes Hall

34-36 Federal

Cleveland

16 Cleveland

Bowdoin Pines

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