# Bowdoin 

AGADEMIC HANDBOOK: POLICIES AND PROCEDURES
$2015-2016$

AUguST 2015
Brunswick, Maine bowdoin.edu/academic-handbook

## Bowdoin

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August 2015
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Bowdoin College complies with applicable provisions of federal and state laws that probibit discrimination in employment, admission, or access to its educational or extracurricular programs, activities, or facilities based on race, color, ethnicity, national origin, religion, sex, sexual orientation, gender identity and/ or expression, age, marital status, place of birth, veteran status, or against qualified individuals with disabilities on the basis of disability.

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

In compliance with the Campus Security Act of 1990, Bowdoin College maintains and provides information about campus safety policies and procedures and crime statistics. A copy of the report is available upon request or by accessing bowdoin.edu/Security/RightToKnow.shtml.

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## General Information

Bowdoin is an independent, nonsectarian, coeducational, residential, undergraduate, liberal arts college located in Brunswick, Maine, a town of approximately 22,000 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 6-7.

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

Enrollment: The student body numbers 1,803 students ( 50 percent male, 50 percent female; last two classes 50/50 and 50/50 percent); about 260 students study away one or both semesters annually; 93 percent complete the degree within five years.

Faculty: Student/faculty ratio 9:1; the equivalent of 204 full-time faculty in residence, 99 percent with Ph.D. or equivalent; 23 head athletic coaches.

Geographic Distribution of Students: New England, 37.8 percent; Middle Atlantic states, 23.1 percent; Midwest, 8.3 percent; West, 12.9 percent; Southwest, 2.9 percent; South, 7.7 percent; international, 7.0 percent. Forty-seven states, the District of Columbia, Guam, Puerto Rico, and twenty-eight countries are represented. Minority and international enrollment is 36 percent.
Statistics: As of June 2015, 38,918 students have matriculated at Bowdoin College, and 30,671 degrees in academic programs have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni/ae include 19,915 graduates, 2,155 non-graduates, 122 honorary degree holders ( 34 alumni/ae, 88 non-alumni/ae), twenty recipients of the Certificate of Honor, and 219 graduates in the specific postgraduate program.

Offices and Office Hours: The Admissions Office is located in Burton-Little House. The offices of the President and Dean for Academic Affairs are located in Hawthorne-Longfellow Hall, the west end of Hawthorne-Longfellow Library. The Treasurer's Office is located in Ham House on Bath Road. The Controller's Office and the Human Resources Office are located at 216 Maine Street. The Development and Alumni Relations offices are located at 83 and 85 Federal Street and in Copeland House. The offices of the Registrar, the Dean of Student Affairs, and Bowdoin Career Planning are in the Moulton Union. The Counseling Service is at 32 College Street. The Department of Facilities Management and the Office of Safety and Security are in Rhodes Hall.
In general, the administrative offices of the College are open from 8:30 a.m. to 5:00 p.m., Monday through Friday.

Telephone Switchboard: Bowdoin College uses an automated call processing system on its main number, 207-725-3000. A live operator can be reached twenty-four hours a day, seven days a week, by pressing " 0 ." Further information about telephone numbers can be found at bowdoin.edu/directory/.

Bowdoin College Website: bowdoin.edu. The online Bowdoin College Academic Handbook can be found at bowdoin.edu/academic-handbook.

## College Calendar

## 214th Academic Year

## 2015

August 25, Tuesday First Year arrival day
August 26-29, Wed.-Sat. Orientation Trips
August 29-Sept. 2, Sat.-Wed. Orientation
September 1, Tuesday

September 2, Wednesday
September 3, Thursday
September 7, Monday
College housing ready for occupancy for upperclass students, 8:00 a.m.

Opening of the College-Convocation, 3:30 p.m.
Fall semester classes begin, 8:00 a.m.
Labor Day (Classes in session, College holiday, some offices closed)

September 13-15, Sun.-Tues. Rosh Hashanah, begins at sundown on Sept. 13 and concludes at sundown on Sept. 15
September 19, Saturday Common Good Day
September 22-23, Tues.-Wed. Yom Kippur, begins at sundown on Sept. 22 and concludes at sundown on Sept. 23

October 9, Friday Fall vacation begins after last class; Note: Columbus Day is Monday, Oct. 12

October 14, Wednesday Fall vacation ends, 8:00 a.m.
October 15-17, Thurs.-Sat. Meetings of the Board of Trustees
Alumni Council, Alumni Fund Directors, and BASIC National Advisory Board meetings

Inauguration of Clayton S. Rose
October 16-18, Fri.-Sun. Homecoming Weekend
October 30, Friday Sarah and James Bowdoin Day
October 30-November 1, Family Weekend
Fri.-Sun.
November 25, Wednesday Thanksgiving vacation begins, 8:00 a.m.*
(November 25-27: College holidays, many offices closed)
November 30, Monday
December 11, Friday Last day of classes
December 12-15, Sat.-Tues. Reading period
December 16-21, Wed.-Mon. Fall semester examinations
December 22, Tuesday College housing closes for winter break, noon
December 24, Thursday Christmas Eve Holiday (College holiday, many offices closed)
December 25, Friday
Christmas Holiday (College holiday, many offices closed)
December 31, Thursday

2016

January 1, Friday
January 18, Monday

January 23, Saturday
January 25, Monday
February 4-6, Thurs.-Sat.
February 15, Monday

March 11, Friday
March 12, Saturday
March 25, Friday
March 26, Saturday
March 27, Sunday
March 28, Monday

April 22-30, Fri.-Sat.

May 11, Wednesday
May 12-14, Thurs.-Sat.
May 12-15, Thurs.-Sun.
May 16-21, Mon.-Sat.
May 22, Sunday
May 27, Friday
May 28, Saturday
May 28, Saturday
May 30, Monday
June 2-5, Thurs.-Sun.

March 31-Apr. 2, Thurs.-Sat. Alumni Council, Alumni Fund Directors, and BASIC National Advisory Board meetings
New Year's Day Holiday (College holiday, many offices closed)
Martin Luther King Jr. Day (College holiday, many offices closed)

College housing available for occupancy, 8:00 a.m.
Spring semester classes begin, 8:00 a.m.
Meetings of the Board of Trustees
Presidents' Day (Classes in session, College holiday, some offices closed)

Spring vacation begins after last class
College housing closes for spring vacation, noon Good Friday

College housing available for occupancy, 8:00 a.m.
Easter
Spring vacation ends, 8:00 a.m.

Passover, begins at sundown on April 22 and concludes at sundown on April 30

Last day of classes; Honors Day
Meetings of the Board of Trustees
Reading period
Spring semester examinations
College housing closes for non-graduating students, noon
Baccalaureate
The 211th Commencement Exercises
College housing closes for graduating students, 6:00 p.m.
Memorial Day (College holiday, many offices closed)
Reunion Weekend

Note: Regular class schedules in effect on holidays listed unless otherwise noted. Staff, check with supervisor to determine if office is closed.
*Wednesday, November 25 classes will be rescheduled on a class-by-class basis by the course instructor.

## The Offer of the College

To be at home in all lands and all ages;
To count Nature a familiar acquaintance, And Art an intimate friend;
To gain a standard for the appreciation of others' work
And the criticism of your own;
To carry the keys of the world's library in your pocket, And feel its resources behind you in whatever task you undertake; To make hosts of friends ...
Who are to be leaders in all walks of life;
To lose yourself in generous enthusiasms
And cooperate with others for common ends-
This is the offer of the college for the best four years of your life.

Adapted from the original "Offer of the College," published in 1906 as the foreword to The College Man and the College Woman by William DeWitt Hyde, seventh president of Bowdoin College (1885-1917).

# Admission and Finangial Aid 

## Admission to the College

Each year the Admissions Committee at Bowdoin College evaluates applications for admission through its three application programs: Early Decision I, Early Decision II, and Regular Decision. The College strives to attract a diverse, multitalented, intellectually adventurous student body. In selecting the first-year class, the Committee pays close attention to a variety of factors; these include a student's academic achievements, extracurricular involvements, and potential to contribute to the Bowdoin community.

Bowdoin requires all applicants to submit the Common Application and complete the Bowdoin member screen. The Common Application is available online and provides students a uniform framework to present their credentials.

While no single factor determines a candidate's eligibility for admission, Bowdoin College is, first and foremost, an academic institution. Therefore, an applicant's high school performance and the level of challenge represented by the coursework are of particular concern to the members of the Admissions Committee. Each applicant must make arrangements with the appropriate high school administrator to submit all official high school transcripts. The Admissions Committee strives to understand each student's performance in the proper context and therefore requires high school administrators to submit a Secondary School Report (SSR) and a High School Profile. Doing so enables the Committee to properly interpret the information presented on the transcript(s). Ideally, the profile illuminates individual high school policies regarding issues such as weighting of grades, rank in class, Honors/AP/IB course offerings, etc. Comments from school officials on the SSR as well as letters of recommendation from two teachers who have taught the student in an academic core subject (core subjects include English, math, lab sciences, social sciences, and foreign languages) can also help the Admissions Office better understand a prospective student's preparation for Bowdoin. Since 1969, the College has made the submission of standardized testing an optional part of the application. Prospective students may decide whether or not their individual test results will enhance their academic profile and application. Exceptions to the score optional policy include home-schooled students and students who attend high schools that do not issue grades. These applicants are required to submit results from either the ACT or the SAT and two SAT subject tests. The subject tests must include either Math Level 1 or Math Level 2 and a science test.

Because of the residential nature of the College, the strong emphasis on community values, and a core belief in collaboration and the open exchange of ideas both in and beyond the classroom, the Admissions Committee does not limit its assessment to a student's transcript and testing. Students have the opportunity, through the personal statement and the supplement, to reveal the quality and depth of their thinking, their ability to communicate ideas in writing, and how they approach learning and the opportunity to interact with others. Students also detail the activities that have captured their interest, areas of accomplishment and recognition, and how they have focused their energies outside the classroom. When possible, applicants are encouraged to visit the campus for an interview or to meet with an alumni representative. On-campus interviews are available from late May until early December. Students who choose to interview with a Bowdoin alumnus or alumna must submit their requests before December 5, 2015.

All Early Decision and Regular Decision admissions decisions for US citizens and permanent residents are made under a "need blind" policy. Under this policy, an applicant's financial resources are not a factor in determining whether or not the student will be admitted. While Bowdoin is committed to enrolling students from overseas, the College does observe a strict budget when supporting non-residents. Therefore, admission for non-US citizens may take a family's financial resources into consideration. To be eligible for financial assistance, international students must apply for aid when submitting their application for admission. All students who anticipate needing financial aid are required to complete an aid application. See Financial Aid, below, for more details.

More information is available at bowdoin.edu/admissions.

## Finangial Aid

At Bowdoin, more than 45 percent of enrolled students receive some amount of grant assistance to help pay for college costs. Grant assistance is money that reduces billed charges on a dollar-for-dollar basis and does not require repayment. With the exception of transfer, international, and admitted wait-list students, admission to Bowdoin is "need blind"-that is, admission does not consider a student's economic status. Bowdoin's financial aid meets $100 \%$ of a student's demonstrated need.

Eligibility for Bowdoin grant assistance is "need based," determined through an analysis of income, asset, and other family information submitted on the CSS PROFILE, federal FAFSA, and federal income tax returns. Bowdoin does not offer merit-based scholarships or grants, with the exception of those awarded through the National Merit Scholarship program.

Bowdoin uses a proprietary need analysis system to determine grant eligibility. State and federal assistance programs use the federal methodology (FM) formula to calculate eligibility. As such, awards may vary from college to college, depending on institutional policies and the formula used to determine need.

When determining institutional grant eligibility, the College evaluates the family's financial capacity to contribute to college costs. Financial aid supplements family resources to enable students from all economic backgrounds to attend Bowdoin.

Bowdoin meets calculated need with grant money from federal, state, and institutional sources and a small work award. If parents need help paying remaining billed charges, eligible students and parents may elect to borrow from available loan programs.

Most Bowdoin students work during the summer and approximately 70 percent work on campus during the academic year to pay for books, supplies, personal expenses, and travel.

In most cases, receipt of private scholarships from local sources does not affect Bowdoin grant awards.

Award decisions are determined annually. Awards can increase from year to year because of tuition increases or reduction in income, for example. Awards can also decrease because of higher family income or fewer children attending undergraduate college. Fairness and equitable treatment guide Bowdoin's need analysis practices. Families with similar financial circumstances receive similar levels of grant support.

For more information about Bowdoin's Student Aid program, go to: bowdoin.edu/studentaid.

## Expenses

## College Charges

Fees for the 2015-2016 academic year are listed below. Travel, books, and personal expenses are not included; the student must budget for such items on his/her own. For planning purposes, students and parents should anticipate that tuition and other charges will increase each year to reflect program changes and other cost increases experienced by the College.

|  | By Semester | Full Year |
| :--- | ---: | ---: |
| Tuition* | $\$ 23,872$ | $\$ 47,744$ |
| Housing | 3,071 | 6,124 |
| Board (19-meal plan) | 3,500 | 7,000 |
| Student Activities Fee* | 234 | 468 |
| Class Dues*: |  |  |
| $\quad$ Seniors | 30 | 60 |
| $\quad$ Other classes | 15 | 30 |

Health Insurance (See Health Care section, page 13.)

* Required fees for all students.

Off-Campus Study Fee
The College assesses a fee for participation in off-campus study programs for which Bowdoin degree credit is desired. The fee for 2015-2016 is $\$ 1,000$ per program.

## Registration and Enrollment

All continuing students are required to register for courses during registration "rounds" held during the prior semester in accordance with the schedules posted at the College. Any student who initially registers after the first week of classes must pay a $\$ 20$ late fee. All students are further required to submit an Enrollment Form by the end of the first week of classes. While registration places students in courses, the Enrollment Form serves to notify the College that the student is on campus and attending classes. A fee of $\$ 20$ is assessed for late submission of the Enrollment Form.

## Refunds

Students leaving the College during the course of a semester are refunded tuition and fees based on the following 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

After adjustments for fixed commitments and applicable overhead expense, refunds for room and board are prorated on a daily basis in accordance with the student's attendance based on the College's calendar. Students who are dismissed from the College within the first five weeks for other than academic or medical reasons are not entitled to refunds. Financial aid awards will be credited in proportion to educational expenses, as stipulated in a student's award letter, but in no case will they exceed total charges to be collected. Title IV funds will be refunded in accordance with federal regulations. Refunds will be made within thirty days of the student's departure.

## Financial Aid

There are opportunities at Bowdoin to receive financial aid in meeting the charge for tuition. Information about scholarships and other financial aid may be found on page 11.

## Room and Board

First-year students and sophomores are guaranteed housing and are required to live on campus. Entering first-year students may indicate their residence preferences online the summer preceding their arrival at Bowdoin. The Associate Director of Housing Operations coordinates housing accommodations for the remaining classes through a lottery system.

Residence hall suites consist of bedroom(s) and a common room and are furnished with essential furniture. College property is not to be removed from the building or from the room in which it belongs; occupants are held responsible for any damage to their rooms or furnishings.

Board charges are the same regardless of whether a student eats at the Moulton Union or Thorne Hall. Students who live in Bowdoin facilities, except apartments and a few other student residences, are required to take a 19 -meal, 14 -meal, or 10 -meal residential board plan. First-year students are required to take the 19-meal plan for their entire first year on campus. Students living in College apartments or off campus may purchase a 9-meal or declining balance board plan or one of the residential plans, if they choose.

## Other College Charges

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

## Health Care

The facilities of the Peter Buck Center for Health and Fitness and the Counseling Service are available to all students. All students must maintain health insurance coverage while enrolled at Bowdoin. The College offers its own policy for those students who do not carry comparable insurance. The College's policy provides year-round coverage, whether a student is enrolled at Bowdoin or in an approved off-campus study program. The full-year accident and sickness insurance plan costs $\$ 2,063$.

A pamphlet specifying the coverage provided by the student health policy is available from the health center and will be mailed in the summer preceding the policy year. Any costs not covered by the insurance will be charged to the student's account.

## Expenses

## 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, must be registered with the Office of Safety and Security. The registration decals cost $\$ 40$ and are valid for the academic year in which they are purchased. Vehicles must be reregistered each academic year. Students wishing to register a vehicle for a period of time less than one semester must make special arrangements with the Office of Safety and Security. All students maintaining motor vehicles at the College are required to carry adequate liability insurance. The College assumes no responsibility for the security of or damage to vehicles parked on campus. Parking on campus is limited and students will be assigned parking space based on availability. Comprehensive information regarding motor vehicles and campus parking is available at bowdoin.edu/ security/parking/index.shtml and in the Bowdoin College Student Handbook online.

## Payment of College Bills

By registering for courses, a student incurs a legal obligation to pay tuition and fees. This debt may be canceled only if a student officially withdraws from the College before the start of classes. Students' accounts must be current (namely, payment of all outstanding balances, including any past due balances) for semester enrollment and course registration to occur. A student with a past due account will not be permitted to register for courses or to enroll without the written consent of the College. After the first week of classes, students who have not enrolled for any reason are dropped from courses. A student's access to his/her residence hall, meal plan, and the library is deactivated at that time. The student is placed on an involuntary leave of absence for the semester (see Academic Standards and Regulations, pages 21-36). Degrees, diplomas, and transcripts are not available to students with overdue accounts.
Bills for tuition, board, room rent, and fees for the fall and spring semesters are generated and posted online in July and December, respectively. Bills are delivered electronically to students who are enrolled or who are participating in off-campus study programs. E-mail notifications are directed to the student's Bowdoin e-mail account. Payment for each semester is due thirty days from the billing date.

Payment may be made by the semester due date, by installment payment plan over the course of the semester, or by combining the two options. Payment plans may be arranged with Tuition Management Systems (TMS); Bowdoin does not operate its own in-house payment plan. Credit cards are not accepted in payment of college charges.

## A Liberal Education at Bowdoin College

William DeWitt Hyde's "The Offer of the College" (page 9) spelled out a vision of the aspirations of a liberal education appropriate to the early twentieth century. Many elements of it still have currency more than one hundred years later. At the beginning of the twenty-first century, a vastly changed College in a dramatically altered world provides a related but expanded offer-of intellectual challenge and personal growth in the context of an active and engaged learning community closely linked to the social and natural worlds.
A liberal education cultivates the mind and the imagination; encourages seeking after truth, meaning, and beauty; awakens an appreciation of past traditions and present challenges; fosters joy in learning and sharing that learning with others; supports taking the intellectual risks required to explore the unknown, test new ideas, and enter into constructive debate; and builds the foundation for making principled judgments. It hones the capacity for critical and open intellectual inquiry-the interest in asking questions, challenging assumptions, seeking answers, and reaching conclusions supported by logic and evidence. A liberal education rests fundamentally on the free exchange of ideas-on conversation and questioning-that thrives in classrooms, lecture halls, laboratories, studios, dining halls, playing fields, and residence halls. Ultimately, a liberal education promotes independent thinking, individual action, and social responsibility.
Since its opening in 1802, Bowdoin has understood the obligation to direct liberal education toward the common good. In the twenty-first century, that obligation is stronger than ever. The challenge of defining a "common good" and acting on it is highlighted, however, in an interconnected world of widely varied cultures, interests, resources, and power. To prepare students for this complexity, a liberal education must teach about differences across cultures and within societies. At the same time, it should help students understand and respect the values and implications of a shared natural world and human heritage. By doing so, a liberal education will challenge students to appreciate and contend with diversity and the conflicts inherent in differing experiences, perspectives, and values at the same time that they find ways to contribute to the common project of living together in the world.
Although a liberal education is not narrowly vocational, it provides the broadest grounding for finding a vocation by preparing students to be engaged, adaptable, independent, and capable citizens.

A student in a residential liberal arts college is removed from many of the immediate responsibilities of daily adult life, making the four years of education extraordinarily privileged ones. Such an education, however, must engage that world-both contemporary and historical, both local and global. This engagement comes through individual and group research, service learning, volunteer activities, summer internships, off-campus study, and more.

The success of a Bowdoin education is evident in the capacity of graduates to be informed and critically analytic readers of texts, evidence, and conclusions; to be able to construct a logical argument; to communicate in writing and speaking with clarity and self-confidence; to understand the nature of artistic creation and the character of critical aesthetic judgment; to have the capacity to use quantitative and graphical presentations of information critically and confidently; and to access, evaluate, and make effective use of information resources in varied forms and media. These fundamental capacities serve as crucial supports for a commitment to active intellectual inquiry-to taking independent and multifaceted approaches to solving complex problems; knowing how to ask important and fruitful questions and to pursue answers critically and effectively; sharing in the excitement of discovery and creativity; and being passionately committed to a subject of study. Graduates should thus have the ability to engage competing views critically, to make principled judgments that inform their practice, and to work effectively with others as informed citizens committed to constructing a just and sustainable world.

## The Curriculum

Bowdoin offers a course of study leading to the degree of Bachelor of Arts. Bowdoin students must design an education in the context of their own developing goals and aspirations and in relation to the College's vision of a liberal education, its distribution requirements, and the requirements of a major field of study. The College requires students to seek breadth in their education through a set of distribution and division requirements that stimulate students to navigate the curriculum in ways that encourage exploration and broaden students' capacities to view and interpret the world from a variety of perspectives.

To graduate, a student must also complete an approved major. The major program challenges students to develop a deeper understanding and self-assurance as independent and creative contributors to an area of study. Students choose a major, using the departmental or interdisciplinary approaches available at Bowdoin, as a way to engage a discipline in depth.

The College's curriculum introduces students to academic disciplines that bring conceptual and methodological traditions to bear in teaching disciplined inquiry, analysis, argument, and understanding. Throughout their four years, students build intellectual capabilities, selfconfidence as independent thinkers and problem-solvers, and come to know the pleasures of discovering and developing proficiencies in new areas of knowledge. A liberal education founded in both breadth and depth teaches students how to continue learning as the world changes and demands new perspectives, knowledge, and skills.

Designing an education is an education in itself. The most fulfilling liberal arts education cannot be fully planned before the first day of class because such mapping would not permit the many new paths for exploration that students discover as they learn about unfamiliar fields, find exciting questions and ideas, and uncover unanticipated interests and talents. Nor can a challenging education emerge if a student selects courses one by one each semester; a liberal education is much more than the sum of thirty-two credits. Bowdoin College permits a wide set of choices to enable students to broaden their views of the world and of their own talents and interests, and to deepen their knowledge and capacities. Designing an education thus requires self-examination, careful thought, substantial flexibility, some intellectual daring, and the wise counsel of academic advisors.

A vital part of the educational experience takes place in the interaction between students and their academic advisors. Each student is assigned a pre-major academic advisor at the start of the first year. The pre-major academic advising system is intended to help students take full advantage of the first two years at Bowdoin and begin to plan the remaining years. It provides a framework within which a student can work with a faculty member to make informed academic decisions. Such a partnership is particularly important during the period of transition and adjustment that typically takes place during the first year in college. Academic advisors may make recommendations about courses, combinations of courses, or direct students towards other resources of the College. They may also play a role at moments of academic difficulty. The effectiveness of the system depends on the commitment of the student and the advisor. Students must declare their majors in the fourth semester of their college enrollment and afterwards are advised by members of their major departments.

## Academic Requirements for the Degree

To qualify for the bachelor of arts degree, a student must have:
Successfully passed thirty-two full-credit courses (or the equivalent);
Spent four semesters (successfully passed sixteen credits) in residence, at least two semesters of which have been during the junior and senior years;

Completed a first-year seminar; this should normally be completed by the end of the first semester and must be completed by the end of the second semester in college;

Completed at least one full-credit course (or the equivalent) in each of the following five distribution areas-mathematical, computational, or statistical reasoning; inquiry in the natural sciences; exploring social differences; international perspectives; and visual and performing arts; these should normally be completed by the end of the fourth semester in college;

Completed at least one full-credit course (or the equivalent) in each of the following three divisions of the curriculum-natural science and mathematics, social and behavioral sciences, and humanities (in addition to the required course in the visual and performing arts); and Completed an approved major.

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

## Distribution Requirements

Students must take at least one full-credit course (or the equivalent) for a letter grade (unless the course is only graded Credit/D/Fail, i.e., some courses in theater and dance) in each of the following five distribution areas:

Mathematical, Computational, or Statistical Reasoning. These courses enable students to use mathematics and quantitative models and techniques to understand the world around them either by learning the general tools of mathematics and statistics or by applying them in a subject area. (Designated by MCSR following a course number in the course descriptions.)
Inquiry in the Natural Sciences. These courses help students expand their understanding of the natural sciences through practices associated with questioning, measuring, modeling, and explaining the natural world. (Designated by INS following a course number in the course descriptions.)

Exploring Social Difference. These courses develop awareness and critical understanding of differences in human societies (such as class, environmental resources, ethnicity, gender, race, religion, and sexual orientation). ESD courses build the analytic skills to examine differences within a society and the ways they are reflected in and shaped by historical, cultural, social, political, economic, and other processes. (Designated by ESD following a course number in the course descriptions.)

International Perspectives. These courses assist students in developing a critical understanding of the world beyond the United States. IP courses provide students with the tools necessary to analyze non-US cultures, societies, and states (including indigenous societies and sovereign nations within the United States and its territories), either modern or historical. (Designated by IP following a course number in the course descriptions.)

## The Curriculum

Visual and Performing Arts. These courses help students expand their understanding of artistic expression and judgment through creation, performance, and analysis of artistic work in the areas of dance, film, music, theater, and visual art. (Designated by VPA following a course number in the course descriptions.)

First-year seminars, independent study courses, and honors projects do not fulfill any of the five Distribution Requirements. Further, these requirements may not be met by Advanced Placement or International Baccalaureate credits, and may only be satisfied with courses taken at Bowdoin. These requirements should be completed by the end of the student's fourth semester in college. A course will be counted as meeting a Distribution Requirement if a student earns a grade of D or better; courses will only be counted if they are taken for a letter grade, though courses will count if they are required to be taken for a Credit/D/Fail grade. Students may not count the same course toward more than one Distribution Requirement.

Also note that the requirement of completing a first-year seminar will only be met if the seminar is taken for regular letter grades.

## Division Requirements

Students must take at least one full-credit course (or the equivalent) from each of the following three divisions of the curriculum.

Natural Science and Mathematics: Designated by the letter a following a course number in the course descriptions.

Social and Behavioral Sciences: Designated by the letter b following a course number in the course descriptions.

Humanities: Designated by the letter c following a course number in the course descriptions.
Like the Distribution Requirements, Division Requirements may not be met by Advanced Placement or International Baccalaureate credits, and may only be satisfied with courses taken at Bowdoin. A course will be counted as meeting a Division Requirement if a student earns a grade of D or better; courses will only be counted if they are taken for a letter grade, though courses will count if they are required to be taken for a Credit/D/Fail grade. With one exception, students may count the same course to meet a division and a distribution requirement. The exception is a course that is designated to meet the humanities division requirement and the visual and performing arts distribution requirement; students may not count such a course to meet both requirements.

## The Major Programs

Students may choose one of six basic patterns to satisfy the major requirement at Bowdoin: a departmental major, two departmental majors (a double major), a coordinate major, an interdisciplinary major, a student-designed major, or any of the preceding with a departmental minor. The requirements for completing specific majors and minors in each department are presented in detail in the section beginning on page 42. Interdisciplinary majors are described beginning on page 76 .

Students should have ample time to be exposed to a broad range of courses and experiences before focusing their educational interests and so do not declare their majors until the fourth semester of their college enrollment. Students are required to declare their majors before registering for courses for the junior year or applying to participate in junior- or senior-year off-campus study programs. Students declare their majors only after consultation with a major academic advisor(s). Since some departments have courses that must be passed or criteria
that must be met before a student will be accepted as a major, students are encouraged to think well in advance about possible majors and to speak with faculty about their educational interests. Students may change their majors after consultation with the relevant departments, but they may not declare a new major after the first semester of the senior year. Special procedures exist for student-designed majors. These are described below.

## Departmental and Program Majors

Departmental and program majors are offered in the following areas:

Africana Studies
Anthropology
Art History
Asian Studies
Biochemistry
Biology
Chemistry
Classical Archaeology
Classical Studies
Classics
Computer Science
Earth and Oceanographic Science
Economics
English
French
(Francophone Studies
beginning in 2016)
Gender, Sexuality, and Women's Studies

German
Government and Legal Studies
History
Latin American Studies
Mathematics
Music
Neuroscience
Philosophy
Physics
Psychology
Religion
Romance Languages and Literatures
Russian
Sociology
Spanish (Hispanic Studies beginning in 2016)
Visual Arts

A student may choose to satisfy the requirements of one department or program (single major) or to satisfy all of the requirements set by two departments or programs (double major). A student who chooses a double major may drop one major at any time.

## Coordinate Major

The coordinate major encourages specialization in an area of learning within the framework of a recognized academic discipline. The coordinate major is offered only in relation to the Environmental Studies Program. For a specific description of this major, see pages 67.

## Interdisciplinary Major

Interdisciplinary majors are designed to tie together the offerings and major requirements of two separate departments by focusing on a theme that integrates the two areas. 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. These are:

Art History and Archaeology
Art History and Visual Arts
Chemical Physics
Computer Science and Mathematics

## The Curriculum

English and Theater
Eurasian and East European Studies
Mathematics and Economics
Mathematics and Education

For complete descriptions of these interdisciplinary majors, see pages 76-80. A student may not select an interdisciplinary major after the junior year.

## Student-Designed Major

Some students may wish to pursue a major program that does not fit the pattern of a departmental major, a coordinate major, or an interdisciplinary major. In such cases, a student may work with two faculty members to develop a major program that demonstrates significant strength in at least two departments. Such strength is to be shown in both the number and pattern of courses involved. A synthesizing project is required. Guidelines for the development of student-designed majors are available from the Office of the Registrar. Student-designed majors require the approval of the Curriculum Implementation Committee. Students must submit their proposals to the Curriculum Implementation Committee by December 1 of their sophomore year.

## The Minor

Most departments and programs offer one or more minor programs 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 both the student's major and minor departments no later than the end of the first semester of the senior year. A minor may be dropped at any time.

The following departments and programs offer a minor:
Africana Studies Gender, Sexuality, and Women's Studies
Anthropology
Art (Art History or Visual Arts)
Asian Studies (Asian Studies, Chinese, or
Japanese)
Biology
Chemistry
Cinema Studies*
Classics (Archaeology, Classical Studies,
Classics, Greek, or Latin)
Computer Science
Dance*
Earth and Oceanographic Science
Economics (Economics or Economics and
Finance)
Education* (Education Studies or
Teaching)
English

German
Government and Legal Studies
History
Latin American Studies
Mathematics
Music
Philosophy
Physics
Psychology
Religion
Romance Languages and Literatures
(French, Italian, or Spanisb; Francophone
Studies, Italian Studies, and Hispanic Studies
beginning in 2016)
Russian
Theater*
Sociology

Environmental Studies

* These departments and programs offer only a minor.


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## Information about Courses

## Course Credit

Bowdoin courses typically meet for three hours a week, with the anticipation that additional time may be spent in lab, discussion group, film viewings, or preparatory work. Most courses earn one credit each. Music and dance performance courses generally earn one-half credit each; the one exception is Advanced Individual Performance Studies in music, which earn one credit each.

Typically, a course may only satisfy the requirements for one major or minor. Upon the consent of both departments, a maximum of one course may be used to meet the requirements of two majors or a major and a minor, with the exception of the coordinate major, which may allow more.

## Course Load

All students at Bowdoin are full-time students and, in order to make normal progress toward the degree, are expected to register for no fewer than four credits each semester. Students may not take fewer than three credits per semester without approval from the Recording Committee; first-year students may not take fewer than four credits per semester without the approval of both their academic advisor and the Dean of First-Year Students. Students may not take more than five credits without approval from their academic advisor(s) and dean. Students may not take more than four credits while on academic probation without approval from the Recording Committee. Seniors may be required to take one course per semester in their major department, at the department's discretion.

No extra tuition charge is levied upon students who register for more than four credits, and, by the same token, no reduction in tuition is granted to students who choose to register for fewer than four credits during any of their eight semesters at Bowdoin. A student may be granted a tuition reduction for taking fewer than three credits only if a ninth semester is required to complete the degree and $\mathrm{s} /$ he has previously been a full-time Bowdoin student for eight semesters. All such appeals should be made in writing to the Dean of Student Affairs and the Senior Vice President for Finance and Administration \& Treasurer.

## Attendance and Examinations

Students are expected to attend the first meeting of any course in which they are registered. Students who do not attend the first meeting may be dropped from the course at the discretion of the instructor, but only if the course was officially full before the first day of the semester. Regular attendance at classes is expected and individual instructors may establish specific attendance expectations. At the beginning of each semester, instructors will make clear to students the attendance regulations of each course. If expectations are unclear, students should seek clarification from their instructors.

Attendance at examinations is mandatory. An absence from any examination, be it an hour examination or a final examination, may result in a grade of F . In the event of illness or other unavoidable cause of absence from examinations, instructors may require documentation of excuses from the Office of the Dean of Student Affairs after consultation with the Health

## Academic Standards and Regulations

Center or the Counseling Service. Students bear ultimate responsibility for arranging make-up or substitute coursework. In unusual cases (family and personal emergencies, illness, etc.), examinations may be rescheduled by agreement of the course instructor and a dean.

Final examinations of the College are held at the close of each semester and must be given according to the schedule determined each semester by the Office of the Registrar. Extra classes may only be scheduled during Reading Period with permission from the Dean for Academic Affairs. All testing activity is prohibited during Reading Period including, but not limited to, take-home exams, final exams, and hour exams. All academic work, except for final examinations, final papers, final lab reports, and final projects, is due on or before the last day of classes; although instructors may set earlier deadlines, they may not set later deadlines. All final academic work, including final examinations, final papers, final lab reports, and final projects is due at or before $5: 00 \mathrm{p} . \mathrm{m}$. on the last day of the final examination period; although instructors may set earlier deadlines, they may not set later deadlines. In all cases, students should consult their course syllabi for specific deadlines for specific courses. The deadline for submitting final, approved honors projects for the Library is determined by the College.

Athletics and other extracurricular activities do not exempt students from the normal policies governing attendance at classes and examinations. When conflicts arise, students should immediately discuss possible alternatives with course instructors. At times, however, students may find themselves having to make serious choices about educational priorities.

A student with three hour examinations in one day or three final examinations in two days may reschedule one for a day mutually agreeable to the student and the instructor. Other changes may be made for emergencies or for educational desirability, but only with the approval of the Office of the Dean of Student Affairs.

Also, no student is required to take an examination or fulfill other scheduled course requirements on recognized major religious holidays and Martin Luther King Jr. Day. The College encourages instructors to avoid scheduling examinations on the following holidays:

2015:
Rosh Hashanah*
Yom Kippur*
2016:
Martin Luther King Jr. Day January 18
Good Friday
Easter
First Day of Passover
April 22

* Holidays begin at sunset on the earlier date shown.


## Course Registration and Course Changes

Students register for courses each semester by obtaining their academic advisor's approval of their course requests and submitting them by the deadline specified by the Office of the Registrar. Since most courses have maximum and minimum registration limits as well as registration priorities, students cannot assume they will be registered for their top-choice courses. Consequently, students should participate in all available "rounds" of registration to have their alternate course choices considered and to make adjustments to their schedules.

Registration for continuing students occurs at the end of the prior semester, generally about four weeks before final examinations. Registration for new students occurs during orientation. Students who are studying away are strongly encouraged to register at the same time as students who are on campus; the Office of the Registrar provides registration instructions and
information at bowdoin.edu/registrar and sends registration instructions to students at their Bowdoin e-mail addresses. Registration in courses is complete only when students submit the Enrollment Form, which must be submitted by the end of the first week of classes. This form verifies that a student is on campus and attending classes. A student who does not submit the Enrollment Form may be removed from all classes and barred from using many of the services of the College, including, but not limited to, dining services, library services, and fitness services. Enrollment Forms submitted late are subject to a $\$ 20$ fine. Any student who registers initially for courses after the first week of classes must pay a $\$ 20$ late fee.

Students may adjust their course schedules by participating in the course add/drop process. Instructions for this process are provided by the Office of the Registrar. An instructor will allow a student to add a course if the following two conditions have been met: (1) the student has the necessary qualifications, including but not limited to the course prerequisites; (2) the student and instructor have agreed on how missed class material and assignments will be managed. An instructor may choose to override the class enrollment limit and allow additional students to register. Normally, no course may be added after the second week of classes. Students may drop courses without permission during the first two weeks of the semester. Students in their first semester at Bowdoin may drop in the third through the sixth weeks with the permission of their dean and advisor. Students in their second semester or later may drop a total of two courses in their Bowdoin career during weeks three through six of a semester with the permission of their academic advisor. This is a serious decision that can impact the completion of a student's education and should only be made in extenuating circumstances. If a student has previously dropped two courses after the second week of the semester in their second semester or beyond, the student would then need to petition the Recording Committee for subsequent requests to drop a course during that period. At no time may a student drop below three courses during any semester without permission from the Recording Committee. Any student who wants to add a course after the two-week deadline must also petition the Recording Committee. Generally petitions are only approved if the student can show extreme personal or medical reasons for the lateness of the change. Any course dropped between the first and end of the sixth week of the semester will not appear on a student's transcript; anything dropped by the Recording Committee will appear on the transcript with a grade of W (for withdrew). In order to add a course late, a student must have been attending the course from the very beginning of the semester. Documentation may be required. Course changes approved by the Recording Committee will require payment of a $\$ 20$ late fee per change, unless the change is made for reasons outside the control of the student.

A student will not receive a grade for a course unless $\mathrm{s} /$ he has completed all steps to register for or add the course. Also, a student will receive a failing grade for a course $s /$ he stops attending unless all steps to drop the course have been completed before the deadline. Students are expected to monitor their records in Polaris, the College's student information system; this includes monitoring the courses for which they are registered. The student bears ultimate responsibility for completing the processes that provide the College with an accurate record of the student's course schedule.

## Independent Study

With approval of a project director, a student may elect a course of independent study for which regular course credit will be given. A department will ordinarily approve one or two semesters of independent study. 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 that have the support of the department, credit may be extended for additional semester courses beyond two.

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There are normally two levels 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 2970-2998. An independent study that will culminate in substantial and original research; or in a fine arts, music, or creative writing project shall be numbered 4000-4028. If a student, in consultation with a department, intends to pursue honors, the student can register for an appropriate honors project course number, 4050-4079. If a department determines that a project does not meet the standards for honors, the course number(s) for one or two semesters of independent study will be changed to 4000-4028. Collaborative studies allow students to work in small groups guided by a member of the faculty. Intermediate collaborative studies are numbered 2999; advanced collaborative studies are numbered 4029. Independent and collaborative studies may not be taken on a Credit/D/Fail basis.

In independent study and honors 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 letter grade. An S grade must be converted to a regular letter grade by the end of the subsequent term. All independent study grades must be regular letter grades by the end of the project's final semester.

## Course Grades

Course grades are defined as follows:

- A, the student has mastered the material of the course and has demonstrated exceptional critical skills and originality;
- B, the student has demonstrated a thorough and above average understanding of the material of the course;
- C, the student has demonstrated a thorough and satisfactory understanding of the material of the course;
- D, the student has demonstrated a marginally satisfactory understanding of the basic material of the course (only a limited number of D grades may be counted toward the requirements for graduation);
- F, the student has not demonstrated a satisfactory understanding of the basic material of the course.
- Plus $(+)$ or minus ( - ) modifiers may be added to B and C grades; only the minus (-) modifier may be added to the A grade.

Faculty report grades to the Office of the Registrar at the close of the semester. Each student in each course must be given a grade by the grade submission deadline as established by the Registrar. Grade reports are available to students in Polaris shortly after the grade submission deadline.

Once reported, no grade is changed (with the exception of clerical errors) without the approval of the Recording Committee. Recorded grades cannot be changed on the basis of additional student work without prior approval of the Recording Committee. If students are dissatisfied with a grade received in a course, they should discuss the problem with the instructor. If the problem cannot be resolved in this manner, the student should consult with the chair of the department and, if necessary, with an associate dean in the Office of the Dean for Academic Affairs who will consult with the department as needed. The student may request a final review of the grade by the Recording Committee.

Most departments will not accept as prerequisites, or as satisfying the requirements of the major, courses for which a grade of D has been given. Questions should be referred directly to the department chair. Students who receive a grade of D or F in a course may retake the course. Both courses and both grades will appear on the transcript, but only one course credit will be given for successful completion of a given course. For grades recorded prior to Fall 2013, only the first grade earned in a repeated course is counted in a student's GPA; beginning with grades recorded for Fall 2013, all grades earned in repeated courses are counted in a student's GPA.

## Credit/D/Fail Option

A student may choose to take a limited number of courses with the Credit/D/Fail grading option as opposed to earning regular letter grades. A course may be changed from letter grades to Credit/D/Fail or vice versa up until the end of the sixth week of classes using the process established by the Office of the Registrar. When a student chooses the Credit/D/ Fail grading option, a grade of CR (credit) is given if the student produces work at a level of C- or above, a grade of D is given if the student produces work at a D level, and a grade of F is given otherwise.

In any given semester, a student must be registered for a minimum of 4.0 total credits to elect the Credit/D/Fail grading option for a course. A student who has 5.0 or more credits in his/her semester course load may elect to take an additional course on a Credit/D/Fail basis. A student may elect the Credit/D/Fail grading option for up to four courses within the 32 credits required for graduation; courses in excess of the 32 credits required may be taken Credit/D/Fail beginning with the semester following the one in which the 32 credits are completed and as long as the semester course load totals 4.0 credits or more. No more than two courses per semester can be taken Credit/D/Fail after the required 32 credits are earned. Courses that are only graded Credit/D/Fail (music ensemble and dance and theater performance courses, as examples) are not counted within these restrictions.
Most departments require that all courses taken to satisfy requirements for the major or minor be taken for regular letter grades. Courses taken to satisfy the College's first-year seminar requirement must be graded with regular letter grades, and courses satisfying distribution and division requirements must also be taken for regular letter grades (unless CR, D, and F are the only grades given for the course). An independent study, collaborative study, or honors project must be graded with regular letter grades.
A grade of CR (credit) will not count toward a student's GPA. A grade of D or F received on the Credit/D/Fail grading scale will count toward a student's GPA, and it will count toward academic standing (probation, suspension, and dismissal).

## Incompletes

The College expects students to complete all course requirements as established by instructors. In unavoidable circumstances (personal illness, family emergency, etc.) and with approval of the Dean of Student Affairs and the instructor, a grade of INC (Incomplete) may be recorded.

An Incomplete represents a formal agreement among the instructor, a dean, and the student for the submission of unfinished coursework under prescribed conditions. Students must initiate their request for an Incomplete on or before the final day of classes by contacting a dean. If the Incomplete Agreement Form has not been approved and received in the Office of the Registrar by the grade submission deadline and no other grade has been assigned, a

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grade of F will be recorded. If the Incomplete Agreement Form has been approved and signed by all necessary individuals, a date is set by which time all unfinished work must be submitted. In all cases, students are expected to finish outstanding coursework in a period of time roughly equivalent to the period of distraction from their academic commitments. In no case will this period of time extend beyond 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 agreed-upon work is not completed within the specified time limit, the Office of the Registrar will change the Incomplete to Fail or ask the instructor to give a grade based on work already completed. Extensions must be approved by the Dean of Student Affairs. Any exceptions to these rules may require approval of the Recording Committee.

## Comment and Failure Cards

Faculty communicate the progress of students in their classes periodically through Comment Cards. These written observations alert students, academic advisors, and the deans in the Office of Student Affairs to potential problems confronting students. They can also be used by faculty to highlight improvement or successes. Students should view Comment Cards as academic progress reports providing warnings or highlighting achievements. When a Comment Card provides a warning, the student should immediately seek out his or her instructor to discuss strategies for improvement. Academic advisors and deans can also be very helpful in developing strategies for improvement and identifying existing support services and resources, but it is the student's responsibility to seek out each of these people. Not all course instructors utilize Comment Cards so students should not rely on this form of communication as their only source of feedback regarding their progress or standing in a course.

At the end of each semester, instructors issue Failure Cards to students who fail courses. These notations provide precise reasons for a student's failing grades. Students and academic advisors generally find these comments instructive as they plan future coursework.

## Transcripts

The Office of the Registrar will furnish official transcripts upon receipt of a written request that includes the student's signature. There is no charge for transcripts unless it is requested that materials be sent by an overnight delivery service.

## Statement of Student Responsibility

The College's Academic Handbook: Policies and Procedures is available online to every Bowdoin student at bowdoin.edu/academic-handbook. Also, students have access to their academic records on Polaris, the College's student information system. In all cases, the student bears ultimate responsibility for reading and following the academic policies and regulations of the College and for notifying the Office of the Registrar of any problems in his or her records.

## The Award of Honors

## General Honors

General honors (or Latin honors) are awarded with the degree on the basis of an average of all grades earned at Bowdoin, with a minimum of sixteen credits required for the computation. To compute the average, an A is assigned four points; a B , three points; a C , two points; a D , one point; and an F , zero points. Plus $(+$ ) or minus $(-)$ modifiers add or subtract three-tenths of a point (0.3). Half-credit courses are weighted as one-half course. Credit grades (CR) are omitted from the computation, but a D or F grade received in a course taken on a Credit/D/Fail basis does count. In the case of a course taken at Bowdoin one or more times prior to Fall 2013, only the first grade is included; beginning with grades recorded for Fall 2013, all grades earned in repeated courses are included. The resulting grade point average (GPA) is not rounded. A degree summa cum laude is awarded to students whose GPAs are in the top two percent $(2 \%)$ of the graduating class; a degree magna cum laude is awarded to students whose GPAs are in the rest of the top eight percent ( $8 \%$ ) of the graduating class; and a degree cum laude is awarded to students whose GPAs are in the rest of the top twenty percent ( $20 \%$ ) of the graduating class.

## Departmental Honors: The Honors Project

The degree with a level of honors in a major subject is awarded to students who have distinguished themselves in coursework in the subject and in an honors project. The award is made by the faculty upon recommendation of the department or program.

The honors project offers seniors the opportunity to engage in original work under the supervision of a faculty member in their major department or program. It allows qualified seniors to build a bridge from their coursework to advanced scholarship in their field of study through original, substantial, and sustained independent research. The honors project can be the culmination of a student's academic experience at Bowdoin and offers an unparalleled chance for intellectual and personal development.

Students who have attained a specified level of academic achievement in their field of study by their senior year are encouraged to petition their department or program to pursue an honors project carried out under the supervision of a faculty advisor. The honors project usually takes place over the course of two semesters; some departments allow single-semester honors projects. The honors project results in a written thesis and/or oral defense, artistic performance, or showing, depending on the student's field of study. Students receive a grade for each semester's work on the honors project and may be awarded a level of honors in their department or program, as distinct from general honors.

The honors project process differs across departments and programs in terms of qualification criteria, requirements for completion, the level of honors awarded, and the use of honors project credits to fulfill major course requirements. Students must complete an honors project to be eligible for departmental or program honors. If a student, in consultation with a department, intends to pursue honors, the student will register for an appropriate honors project course number, 4050-4079. All written work accepted as fulfilling the requirements for departmental honors is to be deposited in the College Library. If students do not fulfill the requirements for completion of the honors project but carry out satisfactory work for an independent study, they will receive independent study credit for one or two semesters and the course number will be changed to $4000-4028$.

## Sarah and James Bowdoin Scholars (Dean's List)

Sarah and James Bowdoin scholarships, carrying no stipend, are awarded in the fall on the basis of work completed the previous academic year. The award is given to the twenty percent $(20 \%)$ of students with the highest grade point average (GPA). Eligible students are those who completed the equivalent of eight full-credit Bowdoin courses during the academic year, six credits of which were graded with regular letter grades and seven credits of which were graded with regular letter grades or non-elective Credit/D/Fail grades. In other words, among the eight required full-credit courses or the equivalent, a maximum of two credits may be graded Credit/D/Fail, but only one credit may be for a course(s) the student elected to take with the Credit/D/Fail grading option. Grades for courses taken in excess of eight credits are included in the GPA. For further information on the College's method for computing GPA, consult the section on General Honors on page 27.

A book, bearing a replica of the early College bookplate serving to distinguish the James Bowdoin Collection in the library, is presented to every Sarah and James Bowdoin scholar who has earned a GPA of 4.00.

Students who receive College honors have their names sent to their hometown newspaper by the Office of Communications. Students not wishing to have their names published should notify the Office of Communications directly.

## Deficiengy in Scholarship

Students are expected to make normal progress toward the degree, defined as passing the equivalent of four full-credit courses each semester. Students not making normal progress may be asked to make up deficient credits in approved courses at another accredited institution of higher education. In addition, students are expected to meet the College's standards of academic performance. The Recording Committee meets twice each year to review the academic records of students who are not meeting these standards. Students are placed on probation or suspension according to the criteria below; students on probation or suspension are not considered to be in good academic standing. In cases of repeated poor performance, a student may be dismissed from the College. In cases when a student's academic standing changes, copies of correspondence with the student that outline the student's academic standing are sent to the student's parents or guardian.

## Academic Probation

Students are placed on academic probation for one semester if they:

1. Receive one F or two Ds in any semester; or
2. Receive one D while on academic probation; or
3. Receive during their tenure at Bowdoin a total of four or five Ds or some equivalent combination of Fs and Ds where one F is equivalent to two Ds. Note: Under some circumstances, a student may qualify for academic suspension. See "Academic Suspension" on page 29.

Also, students are placed on academic probation for one semester upon returning from academic suspension. Students on academic probation will be assigned to work closely with their academic advisor and a person from the Office of the Dean of Student Affairs. Students are required to enroll in four full-credit courses graded with regular letter grades while on academic probation. Students on academic probation normally are not eligible to study away.

## Academic Suspension

Students are placed on academic suspension if they:

1. Receive two Fs, one F and two Ds, or four Ds in any semester; or
2. Receive one F or two Ds while on academic probation; or
3. Receive during their tenure at Bowdoin a total of six Ds or some equivalent combination of Fs and Ds where one F is equivalent to two Ds.

A student on suspension for academic deficiency normally is suspended for one year and may be asked to complete coursework at another accredited four-year institution before being readmitted. Students are expected to earn grades of C- or better in these courses. Other conditions for readmission are set by the Recording Committee and stated in writing at the time of suspension. A suspended student must submit a letter requesting readmission. The Readmission Committee meets to consider these requests. A student who is readmitted is eligible for financial aid, according to demonstrated need, as long as the student adheres to the relevant financial aid deadlines. Once the student is readmitted, the Office of the Registrar will send course and registration information to the student's College e-mail address unless an alternative e-mail address has been provided. Students are ineligible for housing until after they have been readmitted, and there is no guarantee that College housing will be available at that time. While suspended, students are not permitted to visit campus without the written permission of the Dean of Student Affairs. Generally, permission to visit campus is only granted for educational or health treatment purposes. Students are unable to participate in Bowdoin College athletic programs until they have been readmitted. Students are permitted to submit an application for Off-Campus Study (normal deadlines apply); however they are not eligible to apply for resident assistant (RA), proctor, or house resident positions until readmitted.

## Dismissal

Students will be subject to dismissal if they:

1. Incur a second academic suspension; or
2. Receive during their tenure at Bowdoin a total of seven or eight Ds (or some combination of Fs and Ds where one F is equivalent to two Ds ) after having previously been placed on academic suspension; or
3. Receive during their tenure at Bowdoin a total of nine Ds or some equivalent combination of Fs and Ds where one F is equivalent to two Ds.

## Other Academic Regulations

## Leave of Absence

Students may, with the approval of a dean and in consultation with their academic advisor, interrupt their Bowdoin education and take a leave of absence to pursue nonacademic interests for one or two semesters. The conditions governing a leave of absence are as follows:

1. Students must be in good academic and social standing at the end of the semester immediately prior to the start of the leave.
2. Leaves typically begin at the start of a regular semester and may not extend beyond two terms. Exceptions may be granted by the Dean of Student Affairs.
3. Leave extensions, terminations, or cancellations must have the approval of a dean.
4. Students on leave are not considered enrolled at Bowdoin and are expected to leave the College community. Exceptions may be granted by the Dean of Student Affairs.
5. Students on leave may not transfer academic credit to Bowdoin for coursework taken while on leave.

Students on leave of absence will be able to participate in course registration for the semester in which they are expected to return. Course registration instructions will be sent to the student's Bowdoin e-mail address. Students will be able to participate in the selection of housing via a proxy process and are free to visit campus without the dean's permission. While on leave, students are unable to compete in Bowdoin College athletic programs until after the last day of exams prior to the semester that they are scheduled to return. Students are permitted to submit applications for Off-Campus Study and for resident assistant (RA), proctor, or house resident positions, and normal deadlines apply. Students are expected to return at the conclusion of their leave. Readmission is unnecessary, and individuals retain financial aid eligibility if they adhere to College deadlines.

To initiate a request for a leave of absence, students must complete a Leave of Absence Request Form. These are available in the Office of the Dean of Student Affairs and at bowdoin.edu/studentaffairs/forms. Approvals for a leave and the conditions associated with the leave will be provided in writing to the student by the dean.

## Medical Leaves

In unusual circumstances, the Dean of Student Affairs or his or her designee may, upon careful consideration of the welfare of the individual student and the College community, place a student on leave of absence from the College. This policy outlines the circumstances of such leaves as well as various procedures and conditions, including readmission criteria and processes and implications for the student in terms of academic, financial, insurance, and housing matters.

Voluntary Medical Leave: A student is encouraged to request a voluntary medical leave in the event that s/he believes that physical and/or mental health concerns are significantly interfering with the ability to succeed at Bowdoin and/or that the demands of college life are interfering with recovery or safety. A student who, in consultation with either the director of the Health Center or director of the Counseling Service, determines that $\mathrm{s} / \mathrm{he}$ needs to request a voluntary medical leave should contact his/her dean to discuss the terms of the leave as decided by the College.

Involuntary Medical Leave: In unusual circumstances, the Senior Associate Dean of Student Affairs or his or her designee, in consultation with Health Center and/or counseling professionals, may determine that a student needs to be placed on involuntary medical leave. In the event such a determination is made, the College will immediately convey that determination in writing to the student. The determination will be based upon an individualized and objective assessment of the student's ability to safely participate in the College's programs and will examine whether the student presents a direct threat of substantial harm to that student or other members of the College community. The assessment will determine the nature, duration, and severity of the risk; the probability that the potentially threatening injury will actually occur; and whether reasonable modifications of policies, practices, or procedures will sufficiently mitigate the risk. In addition, a student who is not attending class or making satisfactory academic progress may be placed on an involuntary medical or personal leave at the dean's discretion.

Return from Hospitalization: A student who is hospitalized as a result of a physical or mental health issue may wish to take a medical leave from Bowdoin to recover. If so, the student should follow the voluntary medical leave process set forth herein. In the event the student no longer requires a hospital setting and does not wish to take a medical leave, that student must be evaluated by Bowdoin for readiness to return to campus before the student can return. Note that, in some situations, the hospital may determine that the student can be discharged; however, a separate administrative decision is to be made by Bowdoin with respect to whether or not that student can return to campus. It may be determined, upon such an individualized evaluation, that the student has recovered such that $\mathrm{s} / \mathrm{he}$ no longer requires a hospital setting but may still need more support than $\mathrm{s} / \mathrm{he}$ can receive in a residential college setting. In such situations, a required withdrawal from Bowdoin for medical reasons may be considered to allow for a more extended period of recuperation. In that situation, the involuntary medical leave process shall be followed as set forth herein.

Parental Notification: The College reserves the right to notify a parent or guardian of their student's status if circumstances warrant and if it is believed to be in the best interest of the student and the College community without limitations to state and federal privacy laws.

Appeal Procedure for Involuntary Medical Leave: If a student believes that a decision for an involuntary medical leave made by the College is unreasonable or that the procedures and/or information relied upon in making the decision were wrong or unfair, the student may appeal the decision. The appeal must be made in writing to the Dean of Student Affairs. Appeals should clearly state the specific unreasonable, wrong, and/or unfair facts and should present relevant information to support the statements. Once notified of the involuntary medical leave, the student has five (5) business days to submit his or her appeal. The student may not remain on campus during the appeal period. If no timely appeal is submitted, the decision about the involuntary medical leave is final. The dean or his or her designee will respond in writing to the student's written appeal within five (5) business days. The response will provide a conclusion as to whether or not the involuntary medical leave is appropriate upon a thorough review of the relevant facts and information. The dean may request an assessment by an outside medical provider at the student's expense, unless the student demonstrates an inability to afford such an assessment, in which case an alternative payment arrangement shall be made upon mutual discussion by the College and the student.
Readmission Criteria and Procedures: A student who has been placed on medical leave, whether voluntary or involuntary, must complete the following readmission procedures before the student is allowed to return to Bowdoin College:

The student must send a letter to the Readmission Committee, to the attention of the Senior Associate Dean of Student Affairs, requesting formal readmission to the College. The student must send to the Readmission Committee a report from the student's physician and/or mental health provider; the report will include discussion of the student's current health status, course of treatment undergone during the leave, as well as any specific recommendations for the student and the College with respect to the student's successful return to Bowdoin. The report will address the following: (a) the student's readiness to return to the academic and co-curricular demands of college life; (b) the student's readiness to live on campus; (c) the student's ongoing treatment needs; (d) the student's readiness to return to competitive sports, if the student is a collegiate athlete; and (e) any other suggestions that the health care provider deems appropriate.
The student's physician and/or mental health provider must be a licensed physician if the evaluation is regarding medical concerns and must be a licensed mental health provider if evaluating mental health concerns. Further, all providers must be unrelated to the student and must have a specialty and credentials appropriate for the condition(s) of concern. The student is responsible for any cost associated with the physician or mental health provider's evaluation.

The Readmission Committee will review the information provided by the student and evaluate the appropriateness of the student's return. The committee may request further information from the student's medical or mental health providers. In order to provide for such requests, the student will be asked to sign and return a release form so that those individuals at the College who are involved in evaluating the student's return can have access to the student's outside health care providers and have the ability to openly discuss relevant aspects of the student's condition. In addition, the director of the Health Center and/or the director of the Counseling Service may also choose to meet with the student as part of the evaluation.

Once the Readmission Committee has reached a decision, the student will be notified by his or her dean. The decision of the committee is final.

In the event that the student is permitted to return to Bowdoin, the student will speak with his or her dean before returning in order to discuss the terms of the student's readmission including, if appropriate, a discussion of a continuing treatment plan for the student. If such a plan is established, and if the student does not follow the established plan, the College will have the right to revoke its decision to readmit the student and will have the right to require the student to resume his or her medical leave immediately.

## Additional Considerations: Academic Implications

Enrollment Status: While on medical leave, a student is not an enrolled student at Bowdoin College. The medical leave status will continue until the student is prepared to return to the College and is readmitted by the Readmission Committee.
Taking Courses at Other Institutions: The College discourages students on medical leave from transferring course credit to Bowdoin. The Office of the Dean of Student Affairs may allow a limited course load (one or two courses pre-approved by the College) with the support, in writing, of the student's health care provider. All requests for such course approval must be made in writing to the Senior Associate Dean of Student Affairs. Requests for transferring course credit for more than two courses are seldom granted and require prior approval of the Recording Committee.

Off-Campus Study Applications: Students on medical leave are permitted to submit applications for Off-Campus Study, but must comply with the deadlines for those programs. Questions should be directed to the Office of International Programs and Off-Campus Study.

Course Registration: Once the student on medical leave has been readmitted to the College, $\mathrm{s} / \mathrm{he}$ will be able to participate in course registration. Course registration instructions will be sent to the student's Bowdoin e-mail address. It is strongly advised that the student consult with his or her course instructors, advisor, and dean when choosing courses following a medical leave.

Educational Record Reflection: The student's transcript will not reflect his or her medical leave. In the event a medical leave occurs after the start of the semester, courses for that semester will be listed on the transcript with grades of "W" (withdrew). A copy of the student's medical leave approval letter will be placed in the student's file in the Dean of Student Affairs Office. The handling of the student's educational record is governed by the Family Education Rights and Privacy Act (FERPA). For more information about FERPA and a student's rights under the law, consult the Student Handbook online.

## Financial Implications

Financial Aid Eligibility: Students on medical leave retain financial aid eligibility as long as all College deadlines are met prior to readmission. Questions should be directed to the Office of Student Aid.

Tuition and Fee Refunds: Tuition and fee refunds for medical leaves taken during the course of a semester are made in accordance with the College's Refunds Policy. For more information, consult the Refunds section on page 12.
Tuition Insurance: Tuition insurance is available, but it must be purchased prior to the start of the semester. Questions should be directed to the College Bursar.

## Insurance Implications

Student Health Insurance: If the student is currently enrolled in the Bowdoin Student Accident and Sickness Insurance Plan, coverage will continue as specified by the policy. If the student waived Bowdoin's plan, $\mathrm{s} /$ he should consult his or her comparable plan for any exclusions or limitations. Questions should be directed to the Student Health Insurance Coordinator.

## Housing Implications

On a case-by-case basis, the College, in consultation with the student's health care providers, may determine that the returning student should not live on campus but is capable of attending classes. In addition, College housing may not be available to the student upon his or her return, due to space limitations. Once the student has been readmitted, s/he can discuss availability and options with the Office of Residential Life. In the event that College housing is not available, the student may choose to live in housing in the local area. The Office of Residential Life maintains information on local area rental listings. Questions should be directed to the Office of Residential Life.

Presence on Campus: While a student is on medical leave, whether voluntary or involuntary, $\mathrm{s} /$ he will not be permitted to visit campus without prior written permission of the Dean of Student Affairs. Permission will be granted for certain pre-approved educational or health treatment purposes only.

## Agademic Standards and Regulations

## Transfer of Credit from Other Institutions

The Bowdoin degree certifies that a student has completed a course of study that meets standards established by the faculty. It is normally expected that all of a student's coursework after matriculation will be completed either at Bowdoin or in an approved semester- or yearlong off-campus study program. (More information about such programs can be found in the section on Off-Campus Study on page 39.)

Apart from taking courses at Bowdoin or in approved off-campus study programs, the College recognizes that there may be rare occasions when it would serve a student's educational interests to take courses elsewhere for credit toward the Bowdoin degree. In such cases, the work done elsewhere should represent a standard of achievement comparable to what is expected at Bowdoin in a field of study characteristic of the liberal arts.

A student may transfer a cumulative total of no more than four credits from study in summer school programs from four-year accredited colleges/universities. The College does not regularly grant credit for work completed through two-year institutions, correspondence courses, or abbreviated winter terms ("Jan Plans") or their equivalent at other times of the year. The College does not grant credit for professional or vocational study at other institutions. Beginning with courses taken in the Summer 2014 term forward, students may apply for transfer credit approval for online or hybrid courses. Credit is not granted for courses taken elsewhere during the academic year except in special circumstances and with the prior approval of the Recording Committee.

Students must apply to the Office of the Registrar for permission to transfer credit in advance of enrollment at another institution. The Application for Transfer of Credit requires the approval of the appropriate Bowdoin department chair; in order to make this determination the department chair will need to see a course description and/or syllabus for each course. In certain cases, students may be given conditional approval and be required to submit supporting documents, including the course syllabus and all papers and exams, after the course has been completed. The College may decline to grant credit if the course or the student's work in the course does not satisfy Bowdoin academic standards. Credit is not awarded for courses in which the student has earned a grade below C- or for courses not graded with regular letter grades.

No credit will be awarded until an official transcript showing the number of credits or credithours and the grade(s) earned has been received from the other institution. It is the student's responsibility to ensure that the transcript is sent directly to the Office of the Registrar, and the transcript must arrive in a sealed envelope. Normally the transcript must be received and permission to transfer credit secured within one year following the term in which the course was taken. Credit may not be transferred if a longer time period has elapsed.

Transcripts of credit earned at other institutions that have been presented to Bowdoin College for admission or transfer of credit become part of the student's permanent record, but are not issued, reissued, or copied for distribution. Course titles and grades for courses that were transferred from other institutions are not recorded on the Bowdoin transcript; credit only is listed.

Students should be aware that credits earned elsewhere may not transfer on a one-to-one basis; some courses may be accorded less than a full Bowdoin credit. Students are advised to consult with the Office of the Registrar in advance to learn the basis on which transfer credit will be determined. For comparison purposes, students should know that one Bowdoin course is generally understood to be equal to four semester-hours or six quarter-hours.

Pre-Matriculation Credit: Students may have the opportunity to enroll in college-level coursework prior to matriculating at Bowdoin. Bowdoin College will consider granting credit for pre-matriculation coursework, providing the following criteria have been met: (1) the coursework must have been completed on a college campus at an accredited four-year college/ university in courses taught by college faculty, (2) the coursework must have been completed in a class with matriculated college students, (3) the courses may not have been used to satisfy any high-school graduation requirements, and (4) the coursework must represent a standard of achievement comparable to what is expected at Bowdoin in a field of study characteristic of the liberal arts. Bowdoin also recognizes Advanced Placement, International Baccalaureate, and other international exams and may grant credit toward graduation requirements for them. Students should refer to the Advanced Placement and International Baccalaureate rules in effect at the time of their matriculation. Students may apply a maximum of four pre-matriculation credits toward the Bowdoin degree from approved exams or other approved college/university courses.

## Graduation

Students submit to the Office of the Registrar the Notice of Intent to Graduate by November 1 of the academic year in which they will graduate. This required form is considered the official application for graduation. Submission of this form begins the final degree audit process and ensures that students receive all notices related to Commencement. Students will generally receive written notice by May 1 that they have been given preliminary clearance to graduate. Final clearance is determined after all academic work has been completed and final grades for the spring semester have been recorded.

Students may take part in only one Commencement, and they are normally expected to complete all degree requirements before they participate in graduation exercises. Students with two or fewer credits remaining and who can expect to complete all requirements by the end of the following August may be allowed to participate in Commencement but will not receive a diploma. In such cases, the degree will actually be conferred at the May Commencement following the completion of all requirements, and the diploma will be mailed to the student at that time. Speakers at Commencement and other students playing visible leadership roles in the ceremony must have completed all requirements for graduation.

## Resignation

Students may resign from Bowdoin at any time. Resignation permanently terminates the student's official relationship with the College. If a student were to wish at some future date to return to Bowdoin, the student would need to reapply to the College through the regular admissions process as a transfer student. Applicants for readmission are reviewed on a case-by-case basis and should contact the transfer coordinator in the Admissions Office for further information. Given the permanency of resignation, students are encouraged to discuss their plans thoroughly with advisors, parents, and a dean. In instances where students have been away from the College for multiple semesters, they may be administratively resigned.
A decision to resign should be submitted in writing using the Notification of Resignation Form, available in the Office of the Dean of Student Affairs.

Students should consult the Expenses section of this Catalogue for information about tuition and room and board refunds.

## The Recording Committee and Student Petitions

The Recording Committee is a standing committee of the College whose purpose is to address matters pertaining to the academic standing of individual students and to consider exceptions to the policies and procedures governing academic life. The committee meets regularly to consider individual student petitions and meets at the end of each semester to review the records of students who are subject to probation, suspension, or dismissal. Decisions of the committee are final.

Students who are seeking exceptions to academic regulations or curricular requirements must petition the Recording Committee. Petition forms may be obtained from the Office of the Dean of Student Affairs. All petitions require the signature of a dean, and, depending on the nature of the request, some may require supporting documentation from a faculty member, doctor, or counselor. Students are notified of the outcome of their petitions by the secretary of the Recording Committee.

## The Readmission Committee

The Readmission Committee is chaired by the Senior Associate Dean of Student Affairs and comprises the Senior, Associate, and Assistant Deans of Student Affairs; Director of Student Aid; Director of Residential Life; Director of the Counseling Service; Director of the Health Center; Director of the Baldwin Program for Academic Development; and a representative from the Office of Admissions. The Committee meets twice a year, in June and December, to consider the petitions of students who are seeking to return from academic suspension, disciplinary suspension, and/or medical leave. Letters requesting readmission and supporting materials should be directed to the Office of the Dean of Student Affairs. Students on academic suspension, disciplinary suspension, and/or medical leave are not normally eligible to register for classes or make housing arrangements until they have been readmitted. Students seeking readmission are notified of the outcome of their petitions by the Office of the Dean of Student Affairs.

# Speqial Agademic Programs 


#### Abstract

Arabic Students interested in Arabic should contact Russell Hopley, lecturer in Arabic, or Lynn Brettler, academic department coordinator.

\section*{Arctic Studies}

A concentration in Arctic studies, offered through a variety of departments including the Department of Sociology and Anthropology, the Department of Earth and Oceanographic Science, the Environmental Studies Program, and the Peary-MacMillan Arctic Museum and Arctic Studies Center, provides students with opportunities to explore artistic, cultural, social, political, and environmental issues involving Arctic lands, seas, and peoples. Students interested in the Arctic are encouraged to consult with the director of the Arctic Studies Center in order to plan an appropriate interdisciplinary program involving course work and field work at Bowdoin, in study abroad programs, and in the North. Work-study and internship opportunities at the Arctic Museum complement the academic program.


## Coastal Studies

The College's location on the coast of Maine affords distinct opportunities for students to study the complexities of coastal landscapes and seascapes. Beginning in 2015, the College will offer the Bowdoin Marine Science Semester (BMSS), an immersion experience in marine field work, lab work, and independent research open to sophomores, juniors, and seniors from Bowdoin and other colleges, who are interested in the interface between the natural sciences and the ocean. Students take four courses sequentially in three-to-four week modules taught at the Coastal Studies Center, while residing on Bowdoin's main campus. In addition to the Bowdoin Marine Science Semester, other courses take advantage of the natural environments and facilities located at the Coastal Studies Center on Orr's Island (located twelve miles from campus), the Bowdoin Scientific Station (located on Kent Island in the Bay of Fundy), and a variety of other coastal locations in Maine. Summer research fellowships in coastal and marine studies are also available annually. Interested students should speak with David B. Carlon, associate professor of biology and director of the Bowdoin College Coastal Studies Center, or Rosemary Armstrong, the Coastal Studies Program coordinator.

## Engineering Dual-Degree Options

Bowdoin College arranges shared studies programs with the University of Maine College of Engineering (open only to Maine residents), the School of Engineering and Applied Science of Columbia University, the California Institute of Technology (Caltech), and the Thayer School of Engineering at Dartmouth College.

Columbia and the University of Maine allow qualified Bowdoin students to transfer into the third year of their engineering programs after three years at Bowdoin (three years at Bowdoin and two years at the other institution, called a 3-2 option). Columbia also offers a 4-2 option, which may be of interest to some students.

Caltech invites highly qualified students to apply to their 3-2 Program. Determination of acceptance is decided by the Caltech Upperclass Admissions Committee for students to transfer upon completion of their junior year.

## Spegial Agademic Programs

Dartmouth offers a number of options, including taking the junior year at the Dartmouth's Thayer School of Engineering, senior year at Bowdoin, and a fifth year of engineering at Dartmouth.

The student successfully completing the Columbia, Maine, or Caltech program earns a bachelor of science degree from the engineering school and a bachelor of arts degree from Bowdoin, both conferred at the end of their fifth year. For the Dartmouth program, the engineering courses are used as transfer credits to complete the Bowdoin degree, conferred after the fourth year. The Dartmouth engineering degree is conferred upon successful completion of a fifth year in engineering at Dartmouth.

Once a student decides to pursue a dual degree, the student must receive departmental permission and then meet with the associate registrar and submit a declaration of intent to pursue this program to the registrar's office when applying to the subsequent institution.

Finally, students may also apply as regular transfer students into any nationally recognized engineering program, earning only a degree from that engineering institution.

These programs are coordinated by Associate Dean Barry Logan, with assistance from representatives from each natural science department, including Professor William Barker in the Department of Mathematics, Professor Stephen Majercik in the Department of Computer Science, and Professor Dale Syphers and Laboratory Instructor Gary Miers in the Department of Physics and Astronomy. Curricular requirements for engineering dual-degree options vary by program. It is important for students to get advising about the program early in their career at Bowdoin to plan a course of study that will satisfy major and distribution requirements. Students interested in these programs should contact Barry Logan or seek out the representative in the department/program of their intended major.

## Legal Studies

Students considering the study of law may consult with Scheherazade Mason at Bowdoin Career Planning. Bowdoin applicants from every major and department have been successful applicants to highly competitive law schools. Students will be provided guidance and assistance on all aspects of the application process. It is best to begin planning for law school by the beginning of the junior year. Bowdoin Career Planning can introduce students to alumni attending law school or practicing law. In addition, the Career Planning library has excellent written and online resources about law schools and careers in the legal field. Bowdoin Career Planning also supports and assists Bowdoin alumni with the law school application process if they choose to apply in the years following graduation.

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. Students interested in the Columbia program should meet with Professor Allen Springer during their first year at Bowdoin to plan a course of study that will satisfy major and distribution requirements. In addition, the student must meet with the associate registrar once departmental permission is received and submit a declaration of intent to pursue this program to the registrar's office when applying to Columbia University.

## Teaching

Students interested in teaching in schools or enrolling in graduate programs in education should discuss their plans with faculty in the Department of Education. Because the
coursework leading to the teaching minor, along with a concentration in a core secondary school subject area (English, world language, life science, mathematics, physical science, or social studies), is necessary for certification, it is strongly recommended to begin planning early in order to reach your goals. (For information on the Bowdoin Teacher Scholars program, see page 63.) Bowdoin Career Planning offers resources for students interested in education through career counseling and a small library that contains information on teaching; in-depth information about summer and academic year internships, volunteer opportunities with youth, and public and private school job openings can be found on the career planning website: careerplanning.bowdoin.edu/education.

## Off-Campus Study

Semester and Academic Year: The Office of International Programs and Off-Campus Study prepares students to "be at home in all lands" through advising and programming that promote intentionality and integration to broaden and enrich the Bowdoin education. Whether off-campus study occurs abroad or in the United States, students are encouraged to participate in semester- and year-long programs of off-campus study as an extension of the on-campus educational experience and expects the courses in which students earn credit toward the degree to be in a field of study characteristic of the liberal arts and to be academically engaging and complementary to their studies at Bowdoin.

A student who wishes to count academic credit earned in an off-campus study program toward the Bowdoin degree is required to obtain approval, in advance, from the Office of International Programs and Off-Campus Study. If the student wishes to count credits earned in the program toward the major or minor, the approval of the major and minor department is required as well. Students contemplating off-campus study should consult the online Academics Abroad section on the Office of International Programs and Off-Campus Study website; they are urged to begin planning early in the academic year before that in which they hope to study away, and must complete both a registration of intent in November and a full application in February to request permission to study away. Separately, students apply directly to the university or program they wish to attend. (Application deadlines for individual programs vary considerably; it is the responsibility of the student to determine these deadlines and ensure that they are met.) Approvals of late applications to study off-campus are rare and considered on a case-by-case basis. To be approved for Bowdoin degree credit, the proposed program of study away should satisfy the College's academic standards and form an integral part of a student's overall academic plan. Approval of individual requests may also be affected by the College's concern to maintain a balance between the number of students away during the fall and spring terms.

Students are expected to carry a full course-load in any off-campus study program. Credit earned is not formally transferred until the Office of the Registrar has received and reviewed appropriate documentation from the program. In some cases, it may be required that the appropriate Bowdoin department review the student's completed work.
Bowdoin charges an off-campus study fee (see page 12). Financial aid normally continues to be available for students who qualify.

Depending on their academic needs, students normally are expected to select from the options list of approximately one hundred programs and universities kept by the Office of International Programs and Off-Campus Study, which may be found at bowdoin.edu/ocs/ journey/options-list.
Summer: A student may also elect to study abroad during the summer. To transfer credit for courses taken in a summer study-abroad program, a student must gain approval in advance by submitting an Application for Transfer of Credit to the Office of International Programs and Off-Campus Study as well as the Office of the Registrar; refer to Transfer of Credit from Other Institutions on page 34. Financial aid does not transfer for summer study abroad.

# Departments and Programs of Instruction 

The departments of instruction in the following descriptions are listed in alphabetical order. Course titles and course descriptions are available at bowdoin.edu/classfinder. A schedule containing the meeting times of all courses will be issued before each period of registration. Note that major and minor requirements listed apply to students who matriculate in 20152016; other students must follow the major and minor requirements that were in place the year they matriculated.

## Explanation of Symbols Used

[Bracketed Courses]: Courses that are not currently scheduled for a definite semester, but which have been offered within the past two consecutive years, are enclosed in brackets.

* On leave for the fall semester.
** On leave for the spring semester.
$\dagger$ On leave for the entire academic year.
MCSR: Course approved to meet the distribution requirement for Mathematical, Computational, or Statistical Reasoning.
INS: Course approved to meet the distribution requirement for Inquiry in the Natural Sciences.

ESD: Course approved to meet the distribution requirement for Exploring Social Differences.

IP: Course approved to meet the distribution requirement for International Perspectives.

VPA: Course approved to meet the distribution requirement for Visual and Performing Arts.
a: Course approved to meet the division requirement for natural sciences and mathematics.
b: Course approved to meet the division requirement for social and behavioral sciences. c: Course approved to meet the division requirement for humanities.

Note: For a complete explanation of distribution and division requirements see the Curriculum section on pages 16-20.

Prerequisite: Indicates conditions that must be met in order to register for the course.
Course Numbering: Courses are numbered according to the following system:
1000-1049 First-year seminars
1050-1099 Courses intended for the non-major
1100-1999 Introductory courses
2000-2969 Intermediate courses and seminars
2970-2998 Intermediate independent studies
2999 Intermediate collaborative study
3000-3999 Advanced courses and seminars
4000-4079 Advanced independent studies, advanced collaborative study, senior projects, and honors projects

# Africana Studies 

Brian Purnell, Program Director

Professor: Olufemi Vaughan (History)
Associate Professors: Tess Chakkalakal (English), Brian Purnell (History)
Assistant Professor: Judith S. Casselberry

Contributing Faculty: Ericka A. Albaugh, Dana Byrd, Guy Mark Foster, David Gordon, David Hecht, Scott MacEachern, Tracy McMullen, Elizabeth Muther, H. Roy Partridge Jr., Patrick J. Rael, Hanétha Vété-Congolo, Anthony Walton

Africana studies offers courses in the following fields of study: African American, African, and African Diaspora. Over the course of their major/minor in Africana studies, students will develop the following skills through course work, independent studies, and, in some cases, a senior honors project. Students will be able to:
(a) Know about the past and present of the African continent and its diaspora, with a particular focus on the United States, by employing interdisciplinary methods (1000-level courses);
(b) Write clear and concise arguments about the historical, literary, economic, political, social, visual, and religious texts of Africa and its diaspora (1000-, 2000-, 3000-level courses);
(c) Work collaboratively with peers and/or faculty on research pertaining to African American and African political thought and historical contexts (3000-level courses);
(d) Speak or perform coherently to a diverse audience about a specific topic pertaining to African American and African culture, politics, and history (2000- and 3000-level courses);
(e) Design a project using primary and secondary sources regarding Africa and its diaspora (3000-level courses).

## Requirements for the Major in Africana Studies

The major in Africana studies consists of nine interdisciplinary and disciplinary courses in African American, African diaspora, and African studies.

There are two tracks or concentrations:

1. African American: on the national black experience in the United States
2. African and African Diaspora: on African regional, transregional, and African diaspora themes

The course requirements for each track are outlined in the following categories:
African American
Required courses:

1. Introduction to Africana Studies (Africana Studies 1101)
2. 2000-level intermediate seminar
3. 3000-level senior seminar in Africana studies

Electives for the African American concentration comprise six additional courses:

1. At least five courses must be at the 2000 or 3000 level.
2. At least one course must be from the Africa and African Diaspora track.

African and African Diaspora
Required courses:

1. Introduction to Africana Studies (Africana Studies 1101)
2. 2000-level intermediate seminar
3. 3000-level senior seminar in Africana studies

Electives for the African and African Diaspora concentration comprise six additional courses:

1. At least five courses must be at the 2000 or 3000 level.
2. At least one course must be from the African American track.

For both concentrations:

1. A first-year seminar can count toward the courses required.
2. A maximum of two courses, either as independent study or study away, can count toward the major.
3. An approved honors project can count toward the senior seminar requirement.
4. Courses that count toward the major must be taken for regular letter grades, and students must earn grades of C - or better.

## Requirements for the Minor in Africana Studies

The minor in Africana studies consists of five disciplinary and interdisciplinary courses in African American, African Diaspora, and African studies.

The course requirements for the minor in Africana studies are:

1. Introduction to Africana Studies (Africana Studies 1101)
2. Four Africana studies elective courses from any of the two Africana studies tracks. Three of these courses must be at the 2000 and 3000 levels. Only one of these four electives can be an independent study course or a course taken at other colleges/universities.
3. A first-year seminar in Africana studies will count towards the minor in Africana studies.
4. Courses that count toward the minor must be taken for regular letter grades, and students must earn grades of C - or better.

Art<br>Susan E. Wegner, Director, Art History Division<br>Michael Kolster, Department Cbair and Director, Visual Arts Division<br>Martha R. Janeway, Coordinator, Art History Division<br>Alicia Menard, Coordinator, Visual Arts Division<br>Tara Hutton, Visual Arts Technician<br>Professors: Pamela M. Fletchert, Mark C. Wethli<br>Associate Professors: Michael Kolster, James Mullent, Stephen Perkinson, Carrie Scanga, Susan E. Wegner<br>Assistant Professors: Jackie Brown, Dana E. Byrd, Peggy Wang (Asian Studies)<br>Lecturer: Natasha Goldman<br>Visiting Faculty: Mary Hart, Erin Colleen Johnson

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

## Art History

## Requirements for the Major in Art History

The art history major consists of ten courses, excluding first-year seminars. Required are:

1. Art History 1100;
2. One course in African, Asian, or pre-Columbian art history numbered 1103 or higher;
3. One course from Art History 2090 (same as Archaeology 1101), 2100 (same as Archaeology 1102), 2130, 2140, 2150, or 2260;
4. One course from Art History 2220, 2230, 2240, or 2320;
5. One course from Art History 2420, 2520, 2540, 2620, or 2640;
6. One additional intermediate course (numbered 2000-2969);
7. Two advanced seminars (numbered 3000-3999); and
8. Two additional art history courses numbered higher than 1101 , one of which may be an independent study.

Art history majors are also encouraged to take courses in foreign languages and literature, history, philosophy, religion, and the other arts.

## Interdisciplinary Majors

The department participates in interdisciplinary programs in art history and archaeology and in art history and visual arts. Art history majors may do a coordinate major with environmental studies. See pages 76-80.

## Requirements for the Minor in Art History

The minor consists of five courses, excluding first-year seminars. Required courses are: Art History 1100; two intermediate courses (numbered 2000-2969); one advanced course (numbered 3000-3999); and one additional art history course numbered higher than 1100.

Courses that will count toward the major and minor must be taken for regular letter grades (not Credit/D/Fail), and students must earn grades of C- or better in these courses.

## Seminars in Art History

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 sufficient background. The department does not expect to give all, or in some cases any, seminars each semester. As the seminars are varied, a given topic may be offered only once, or its form changed considerably from time to time.

## Visual Arts

## Requirements for the Major in Visual Arts

The major consists of eleven courses, which must include: Visual Arts 1101; two of three courses 1201, 1401, and 1601; and 3902. Five additional visual arts courses must be taken, one of which must be numbered 3000-3999, and no more than one of which may be an independent study course. Two courses in art history are also required.

## Requirements for the Minor in Visual Arts

The minor consists of six courses, which must include: Visual Arts 1101 and one of 1201, 1401, or 1601 . Three additional visual arts courses must be taken, no more than one of which may be an independent study course. One course in art history is also required.

Courses that will count toward the major and minor must be taken for regular letter grades (not Credit/D/Fail), and students must earn grades of C- or better in these courses.

Visual arts courses without prerequisites are frequently oversubscribed; registration preference is then given to first- and second-year students, as well as to juniors and seniors fulfilling requirements of the visual arts major or minor.

# Asian Studies 

Vyjayanthi Ratnam Selinger, Program Director
Suzanne M. Astolfi, Program Coordinator

Professors: John C. Holt (Religion), Shu-chin Tsui (Cinema Studies)
Associate Professors: Songren Cuit, Belinda Kong (English), Henry C. W. Laurence
(Government), Vyjayanthi Ratnam Selinger, Rachel Sturman (History)
Assistant Professors: Christopher Heurlin* (Government), Peggy Wang (Art History),
Leah Zuo $\dagger$ (History)
Instructor: Sakura Christmas (History)
Senior Lecturer: Hiroo Aridome
Visiting Senior Lecturer: Lisa Chang Ahnert
Lecturer: Xiaoke Jia
Research Assistant Professor: Sree Padma Holt
Contributing Faculty: Connie V. Chiang, David Collingst, Rachel Ex Connelly, Sara A. Dickey, Frances Gouda, Nancy E. Riley, Vineet Shende, Yao Tang

Students in Asian studies focus on the cultural traditions of China, Japan, or South Asia (India, Sri Lanka, Pakistan, Bangladesh, and Nepal). In completing the major, each student is required to gain a general understanding of one of these cultural areas, to acquire a working proficiency in one of the languages of South or East Asia, to develop a theoretical or methodological sophistication, and to demonstrate a degree of applied specialization. These principles are reflected in the requirements for an Asian studies major.

## Requirements for the Major in Asian Studies

One majors in Asian studies by focusing on a particular geographic and cultural area (e.g., South Asia) or by specializing in the subfield of disciplinary Asian studies. Eight courses are required in addition to the study of an Asian language. These eight include a senior seminar (numbered 3000-3969) 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-year project. Students must earn a grade of C- or better in order to have a course count for the major. One course taken with the Credit/D/Fail grading option may count for the major as long as a CR (Credit) grade is earned and the course is not at the advanced level (numbered 3000-3999). No "double counting" of courses is allowed for the major. First-year seminars do count for the major.

The major requires courses from two 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. The College does not directly offer courses in any South Asian language. Arrangements may be made with the director of the program and the Office of the Registrar to transfer credits from another institution, or students may meet this requirement by studying Sinhala on the ISLE Program or Tamil on the SITA Program. Advanced language study is important for and integral to the major. In addition to the required two years of language study, students may apply up to three advanced intermediate (third-year) or advanced (fourth-year) East Asian language courses toward the total of eight required for the area-specific or disciplinary major.

2a. Area-specific option. Eight courses, seven of which focus on the student's area of specialization and one of which is in an Asian cultural area outside that specialization. One of these eight courses is normally a senior seminar. The possible areas of specialization are China, Japan, East Asia, and South Asia. Students must take at least one pre-modern and one modern course in their area of specialization. Students specializing in China must take one pre-modern and one modern course; those specializing in Japan must take one pre-modern and one modern course; and those focusing on South Asia must take one intermediate course from two of the following three areas: anthropology, history, and religion, all of which must have South Asia as their primary focus.

2b. Disciplinary-based option. Eight courses, at least five of which must be in the chosen discipline (e.g., government, history, literature, religion, and other approved areas). Those choosing this option should consult with their advisor concerning course selection and availability. One of the eight courses must be an advanced course (numbered 3000-3969) in the discipline of focus, wherever possible. The three remaining courses, chosen in consultation with an advisor, must explore related themes or relate to the student's language study. The language studied must be in the student's primary cultural or national area of focus, or in cases where a discipline allows for comparison across areas, in one of the primary areas of focus.

## Requirements for the Minor in Asian Studies

Students focus on the cultural traditions of either East Asia or South Asia by completing a concentration of at least five courses in one geographic area or four courses in one geographic area and one course outside that specialization. Of these five courses, two may be language courses, provided that these language courses are at the level of third-year instruction or above. Two courses completed in off-campus programs may be counted toward the minor. Students focusing on South Asia must take one intermediate course (numbered 2500-2749) from each of the following three areas: anthropology, history, and religion, all of which must have South Asia as their primary focus. Students must earn a grade of C- or better in order to have a course count for the minor. One course taken with the Credit/D/Fail grading option may count for the minor as long as a CR (Credit) grade is earned and the course is not at the advanced level (numbered 3000-3999). No "double counting" of courses is allowed for the minor. First-year seminars do count for the minor.

## Requirements for the Minor in Chinese or Japanese

The minor consists of five courses. Of these five courses, four must be in the chosen language. Students who have background in the language must take four courses in the language beginning with the course in which they are initially placed. The fifth course may be either an advanced language class, or a literature, film, or culture course in the area of language study, including a first-year seminar. The roster of qualified classes may change, so students should consult with their advisors. Courses that count for the minor may not be counted for another major or minor. Up to two credits from off-campus study may count toward the minor.

## Off-Campus Study

Foreign study for students interested in Asian studies is highly recommended. Established programs in the People's Republic of China, Hong Kong, and Taiwan are available for students interested in China. Students are particularly encouraged to attend the ACC, CET, and IUP programs. The AKP and JCMU programs are recommended for students interested in Japan, but students may select another program based upon their academic interests.

## Bioghemistry

The ISLE and SITA programs are recommended for students interested in South Asia. Students should consult with the Asian Studies office or website and Off-Campus Study for information about these and other programs. Up to three credits from off-campus study (excluding beginning and intermediate—first- and second-year—language courses) may count toward the major. Up to two credits from off-campus study (excluding language courses) may count for the minor.

## Program Honors

Students contemplating honors candidacy in the program must have earned a B or above in program course offerings and present clearly articulated, well-focused proposals for scholarly research. Students must prepare an honors thesis and successfully defend their thesis in an oral examination.

## Bioghemistry

Bruce D. Kohorn, Program Director
Julie Santorella, Program Coordinator
Professor: Bruce D. Kohorn (Biology)
Associate Professors: Danielle H. Dube (Chemistry), Anne E. McBride (Biology)
Assistant Professors: Benjamin C. Gorske (Chemistry), Kana Takematsu (Chemistry)
Laboratory Instructor: Kate R. Farnham
Contributing Faculty: Richard D. Broene, Barry A. Logan
Note: Following is a list of required and elective courses for the major in biochemistry. Please refer to the Departments of Biology, Chemistry, Mathematics, and Physics for further information.

## Requirements for the Major in Biochemistry

All majors must complete the following courses: Biology 1102 or 1109, 2124; Chemistry 1102 or 1109, 2250, 2260, 2320, 2510; Mathematics 1700; Physics 1130 and 1140.

Two electives from the following: (One must be 3000 or above.)
Biology 2210 a - MCSR, INS. Plant Physiology
Biology 2112 a - MCSR, INS. Genetics and Molecular Biology
Biology 2118 a - MCSR, INS. Microbiology
Biology 2175 a - MCSR, INS. Developmental Biology
Biology 2557 a Immunology
Biology 2566 a Molecular Neurobiology
Biology 3304 a Topics in Molecular Biology
Biology 3306 a Free Radicals and Antioxidants
Biology 3314 a Advanced Genetics and Epigenetics
Biology 3333 a Advanced Cell Biology
Chemistry 2100 a - MCSR, INS. Quantitative Analysis
Chemistry 3250 a Structure Determination in Organic Chemistry
Chemistry 3270 a Biomimetic and Supramolecular Chemistry
Chemistry 3310 a Chemical Biology
A minimum of eleven courses related to biochemistry must be completed for the major.
Students placing out of Math 1700 must take Math 1300 (Biostatistics) or one math course higher than 1700.

Students placing out of Biology 1109, Chemistry 1109, Physics 1130 or 1140 must still complete a minimum of eleven courses related to biochemistry.

AP exams are used for placement in courses for the biochemistry major but do not count toward the eleven courses required for the major.

Biochemistry majors cannot minor or major in biology, chemistry or neuroscience.

## Biology

Nathaniel T. Wheelwright, Department Chair
Julie J. Santorella, Department Coordinator
Professors: Patsy S. Dickinson (Neuroscience), Amy S. Johnson, Bruce D. Kohorn
(Biochemistry), John Lichter** (Environmental Studies), Barry A. Logan, Nathaniel T. Wheelwright
Associate Professors: Jack R. Batemant, David Carlon, Hadley Wilson Horch (Neuroscience), William R. Jackman, Anne E. McBride (Biochemistry), Michael F. Palopoli
Assistant Professor: Vladimir Douhovnikoff*
Director of Bowdoin Scientific Station on Kent Island: Damon P. Gannon
Director of Coastal Studies Center: David Carlon
Visiting Faculty: Barbara Lyon, Payal Ray
Fellow: Sarah Kingston
Laboratory Instructors: Pamela J. Bryer, Shana Stewart Deeds, Aimee M. Eldridge, Kate R.
Farnham, Sandra Fussell, Janet Gannon, Stephen A. Hauptman, Jaret S. Reblin

## Requirements for the Major in Biology

The major consists of eight courses in the department exclusive of independent study and courses below the introductory level. Majors are required to complete Biology 1102 or 1109, and three of the twelve core courses. Core courses are divided into three groups. One course must be taken from each group. Majors are also required to complete four elective courses, at least two of which have to be higher than 2499.

Group 1:
Genetics and Molecular Biology; Microbiology; Developmental Biology; Biochemistry and Cell Biology; Neurobiology

Group 2:
Comparative Physiology; Plant Physiology; Developmental Biology; Neurobiology Group 3:

Behavioral Ecology and Population Biology; Biology of Marine Organisms; Evolution; Biodiversity and Conservation Science; Marine Molecular Ecology and Evolution

Majors must also complete: Mathematics 1700 (or above) or Mathematics 1600 and either Mathematics 1300 or Psychology 2520. Additional requirements are Physics 1130 (or any physics course that has a prerequisite of Physics 1130), Chemistry 1102 or 1109, and

## Biology

Chemistry 2250. Students are advised to complete Biology 1102 or 1109 and the chemistry, mathematics, and physics courses by the end of the sophomore year. Students planning postgraduate education in science or the health professions should note that graduate and professional schools are likely to have additional admissions requirements in chemistry, mathematics, and physics. Advanced placement credits may not be used to fulfill any of the course requirements for the major.

## Grade Requirements

Only one D grade is allowed in courses required for the major or minor. This D must be offset by a grade of B or higher in another course also required for the major or minor. Courses that will count toward the major or minor must be taken for regular letter grades (not Credit/D/Fail).

## Interdisciplinary Majors

The department participates in interdisciplinary programs in biochemistry, environmental studies, and neuroscience. See pages 76-80.

## Requirements for the Minor in Biology

The minor consists of five courses within the department, exclusive of independent study and courses below the 1100 level. Minors are required to complete Biology 1102 or 1109, and two core courses, each from a different core group (see Requirements for the Major in Biology).

## Chemistry

Dharni Vasudevan, Department Chair
Penny Westfall, Department Coordinator
Professors: Richard D. Broene, Jeffrey K. Nagle, Elizabeth A. Stemmler, Dharni Vasudevan (Environmental Studies)
Associate Professor: Danielle H. Dube (Biochemistry)
Assistant Professors: Soren N. Eustis $\dagger$, Benjamin C. Gorske (Biochemistry), Kana Takematsu (Biochemistry)
Lecturer: Michael P. Danahy
Visiting Faculty: Simbarashe Nkomo
Laboratory Instructors: Rene L. Bernier, Martha B. Black, Beverly G. DeCoster, Judith C. Foster, Colleen T. McKenna, Paulette M. Messier

## Requirements for the Major in Chemistry

The chemistry major consists of a core curriculum and additional electives within a single area of concentration. The core curriculum requirements are Chemistry 1101 and 1102 or Chemistry 1109, 2100, 2250, 2400; Mathematics 1700 or higher; and Physics 1130 and 1140. (For students who place into Physics 1140, only one physics course is required.) Students are advised to begin their core curriculum as soon as possible. Depending on preparation and placement results, some students may begin with advanced courses.

## Area of Concentration Requirements:

Chemical: Chemistry 2260, 2510, and 2520; and any two electives from the following: Chemistry 2320 and chemistry courses at the advanced level (numbered 3000-3999). (Only one course numbered 4000-4051 may count toward the major.)

Educational: Chemistry 2510 or 2520; Education 1101, 2203, 3301, 3302; and two additional chemistry electives selected in consultation with the advisor. Students interested in qualifying for the teaching minor and/or the Bowdoin Teacher Scholars certification program should consult with their major advisor as well as with a faculty member in the Department of Education to determine additional "physical science" course requirements.

Environmental: Chemistry 2510. Four electives that must include at least two molecular perspective courses from the following: Chemistry 2050 (same as Earth and Oceanographic Science 2325 and Environmental Studies 2205), 3050 (same as Environmental Studies 3905), 3060 (same as Environmental Studies 3906), or 3100. At least one environmental perspectives course from the following: Chemistry 1105 (same as Biology 1158 and Environmental Studies 2201), Earth and Oceanographic Science 2005 (same as Environmental Studies 2221), 2585 (same as Environmental Studies 2282); Physics 2810 (same as Earth and Oceanographic Science 2810 and Environmental Studies 2253), 3810 (same as Earth and Oceanographic Science 3050 and Environmental Studies 3957); Biology 2325 (same as Environmental Studies 2225), or 3394 (same as Environmental Studies 3994). At least one course from the concentration must be at the advanced level (numbered 3000-3999).

Geochemical: Chemistry 2050 (same as Earth and Oceanographic Science 2325), 2510, and 3100; and at least two electives from the following: Earth and Oceanographic Science 2005 (same as Environmental Studies 2221), 2165, 2585 (same as Environmental Studies 2282), 3020, or 3115. At least one elective from the concentration must be at the advanced level (numbered 3000-3999).

## Chemistry

Neurochemical: Biology 1102 or 1109 , Chemistry 2260, 2320, and 2510 or 2520; and two electives from the following: Biology 2135, 2553, 2566; and one advanced neuroscience course (numbered 3000-3999).

Only one grade of D may be counted for the major or minor. This D must be offset by a grade of B or higher in another course also required for the major or minor. Generally, courses for the major or minor must be taken for regular letter grades (not Credit/D/ Fail). Under special circumstances, however, a student may petition the department chair to allow one required chemistry course or one other course required for the major or minor (Mathematics 1600 or 1700, or Physics 1130 or 1140) to be taken with the Credit/D/Fail grading option.

The chemistry major can serve as preparation for many career paths after college, including the profession of chemistry, graduate studies in the sciences, medicine, secondary school teaching, and many fields in the business world. The department offers programs based on the interests and goals of the student; therefore, a prospective major should discuss his or her plans with the department as soon as possible. Regardless of career goals, students are encouraged to develop their critical thinking and problem-solving skills by participating in a collaborative student-faculty research project (Chemistry 2970-2979, 4000-4051, or summer research).

The department also offers an American Chemical Society-certified major in chemistry. The requirements for certification are met by taking additional courses in chemistry and other disciplines. Students interested in this certification program should consult their advisor and refer to guidelines found at acs.org/cpt.

## Independent Study

Students may engage in independent study at the intermediate (2970-2979) or advanced (4000-4051) level.

## Interdisciplinary Majors

The department participates in interdisciplinary programs in biochemistry, chemical physics, and environmental studies. See pages 76-80.

## Requirements for the Minor in Chemistry

The minor consists of four chemistry courses at or above the intermediate level (numbered 2000-2969). Biochemistry majors may not minor in chemistry.

## Ginema Studies

Aviva Briefel, Program Director<br>Laurie Holland, Program Coordinator<br>Professors: Aviva Briefel (English), Shu-chin Tsui (Asian Studies), Tricia Welsch<br>Assistant Professor: Allison Cooper<br>Visiting Faculty: Sarah Childress

Film has emerged as one of the most important art forms of the modern era. The Cinema Studies Program at Bowdoin introduces students to the techniques, history, and literature of film in order to cultivate an understanding of both the vision and craft of film artists and the views of society and culture expressed in cinema. Bowdoin College does not offer a major in cinema studies.

## Requirements for the Minor in Cinema Studies

Students minoring in cinema studies are required to complete a total of five courses. These must include Cinema Studies 1101, Cinema Studies 2201 or 2202 (History of Film I or II), a 3000 -level seminar that must be taken at Bowdoin, a cinema studies course that incorporates theory, and a course in non-US cinema. Students can count one class for more than one requirement (i.e., a $3000-\mathrm{level}$ course with a theory component). First-year seminars in cinema studies may count toward the minor, but no more than two courses below the 2000 level will count toward the minor.

# Classics 

Jennifer Clarke Kosak, Department Cbair<br>Sandra Kauffman, Department Coordinator<br>Professor: Barbara Weiden Boyd*<br>Associate Professors: James Higginbotham, Jennifer Clarke Kosak, Robert B. Sobak $\dagger$<br>Lecturer: Michael Nerdahl<br>Visiting Faculty: Peter Aicher, Ryan McConnell

The Department of Classics offers three major programs: one with a focus on language and literature (Classics), one with a focus on classical archaeology (Classical Archaeology), and one that looks at the ancient world from multiple perspectives (Classical Studies). Students pursuing these majors 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 three major programs: for all, requirements in Greek and/or Latin and in classical culture must be fulfilled. Courses that will count toward the programs offered by the department must be taken for regular letter grades (not Credit/D/Fail), and students must earn grades of C - or better in these courses.

## 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 Greek and Latin courses is to study the ancient languages and literatures in the original. By their very nature, these courses involve students in the politics, history, and philosophies of antiquity. Advanced language courses focus on the analysis of textual material and on literary criticism.

## Requirements for the Major in Classics

The major in Classics consists of ten courses:

- at least six of the ten courses chosen from offerings in Greek and Latin, including at least two courses in Greek or Latin at the 3300 level;
- either Archaeology 1101 (same as Art History 2090) or 1102 (same as Art History 2100);
- either Classics 1101 or 1102;
- either Classics 1111 (same as History 1111) or 1112 (same as History 1112);
- a research seminar taken in the junior or senior year;
- at least one course at the advanced level (numbered 3300-3999) taken during the senior year.

Students concentrating in one of the languages are encouraged to take at least two courses in the other. As a capstone to this major, a research seminar taken in the junior or senior year is required; a research seminar is one in which a substantial research project is undertaken and successfully completed.

## Requirements for the Major in Classical Studies

The Classical Studies major provides a useful foundation for students who seek a multidisciplinary view of the ancient world. The major combines coursework in an ancient language (Greek or Latin) with courses that explore the culture, history, and traditions of the ancient Mediterranean.

The major in Classical Studies consists of ten courses:

- a minimum of three courses in a single ancient language (Greek or Latin);
- at least one of Classics 1111 (same as History 1111) or 1112 (same as History 1112);
- at least one of Classics 1101, 1102, Archaeology 1101, or Archaeology 1102 (same as Art History 2100);
- at least three courses selected from 2200-level offerings in Classics or Classical Archaeology;
- of the five courses required at the 1100 and 2200 levels, at least one should be chosen from offerings in classical archaeology;
- of the five courses required at the 1100 and 2200 levels, one may be selected from appropriate offerings outside the department, with classics department approval;
- at least two courses in the classics department at the advanced level (numbered 3300-3999);
- a research seminar taken in the junior or senior year.

As a capstone to this major, a research seminar taken in the junior or senior year is required; a research seminar is one in which a substantial research project is undertaken and successfully completed.

## Requirements for the Major in Classical Archaeology

The Classical Archaeology major 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.
The major in Classical Archaeology consists of ten courses:

- at least five of the ten courses chosen from offerings in archaeology, including Archaeology 1101 (same as Art History 2090), 1102 (same as Art History 2010), and at least one archaeology course at the advanced level (numbered 3300-3999);
- at least four semesters of Latin or three semesters of Greek;
- a research seminar taken in the junior or senior year.

Students majoring in Classical Archaeology are also encouraged to take at least one course from the department's offerings in ancient history. As a capstone to this major, a research seminar taken in the junior or senior year is required; a research seminar is one in which a substantial research project is undertaken and successfully completed.

## Interdisciplinary Major

The department participates in an interdisciplinary program in archaeology and art history. See page 76.

## 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 2204 or a Latin course at the advanced level (numbered 3300-3969);
4. Archaeology: Six courses in the department, including either Archaeology 1101 (same as Art History 2090) or 1102 (same as Art History 2100), one archaeology course at the advanced level (numbered 3300-3969), and two other archaeology courses;
5. Classical Studies (Greek, or Roman): Six courses, including:
a. -for the Greek studies concentration: two courses in the Greek language; Archaeology 1101 (same as Art History 2090); one of the following: Classics 1011 (or any other appropriate first-year seminar), Classics 1101, 1102, or 1111 (same as History 1111); Government 2200; or Philosophy 2111; and two of the following: any advanced archaeology course (numbered 3300-3969) focusing primarily on Greek material; Classics 2970-2973 (Independent Study) or any intermediate or advanced Greek or classics course (numbered 2000-2969 or 3300-3999) focusing primarily on Greek material.
b. -for the Roman studies concentration: two courses in the Latin language; Archaeology 1102 (same as Art History 2100); one of the following: Classics 1018 (or any other appropriate first-year seminar), Classics 1101, 1102, or 1112 (same as History 1112); or Government 2200; or Philosophy 2111; and two of the following: Archaeology 2202 or any archaeology course numbered 3000-3969 focusing primarily on Roman material; Classics 2970-2973 (Independent Study) or any intermediate or advanced Latin or classics course (numbered 2000-2969 or 3300-3999) focusing primarily on Roman material.

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

## Classics and Archaeology at Bowdoin and Abroad

Archaeology classes regularly use the outstanding collection of ancient art in the Bowdoin College Museum of Art. Of special note are the exceptionally fine holdings in Greek painted pottery and the very full and continuous survey of Greek and Roman coins. In addition, there are numerous opportunities for study or work abroad. Bowdoin is a participating member of the Intercollegiate Center for Classical Studies in Rome, where students majoring in classics and classical archaeology can study in the junior year. 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.

# Computer Scienge 

Laura Toma, Department Chair<br>Suzanne M. Theberge, Senior Department Coordinator

Professor: Eric L. Chown<br>Associate Professors: Stephen M. Majercik, Laura I. Toma<br>Assistant Professor: Mohammad T. Irfan<br>Visiting Faculty: Sean Barker, Clare Congdon, Allen Harper

The major in computer science is designed to introduce students to the two fundamental questions of the discipline: What computational tasks is a computer capable of doing? How can we design, analyze, and implement efficient algorithms to solve large, complex problems? Thus, the discipline requires thinking in both abstract and concrete terms, and the major provides an opportunity for students to develop the analytical skills necessary for efficient algorithm design as well as the practical skills necessary for the implementation of those algorithms. The range of problems that can be attacked using the techniques of computer science spans many disciplines, and computer scientists often become proficient in other areas. Examples of areas that students can study in the department include distributed systems, cloud computing, sustainability, social and economic networks, algorithms for large data and high-performance computing, cognitive science, robotics, swarm intelligence, and artificial intelligence and the arts. The computer science major can serve as preparation for graduate study in computer science as well as careers in teaching, research, and industry (such as financial services and Internet-related businesses).

## Requirements for the Major in Computer Science

The major consists of ten computer science courses: Introduction to Computer Science (Computer Science 1101); Data Structures (Computer Science 2101), Algorithms (Computer Science 2200), and seven elective courses at the intermediate level (numbered 2000-2969) or above that satisfy the following requirements: at least one course in each of the areas: Algorithms and Theory, Artificial Intelligence, and Systems; at least one course designated a Projects course; and at least four advanced-level courses (numbered 3000-3999). Independent studies at the intermediate or advanced level (except those enrolled in as part of an honors project) may be used to satisfy one of these elective requirements. Prospective majors should take Computer Science 2101 and 2200 as soon as possible after Computer Science 1101, since these courses are prerequisites for many other computer science courses. Students, particularly those who intend to do graduate work in computer science or a related field, are encouraged to collaborate with faculty on research projects through independent studies, honors projects, and fellowship-funded summer research. These students are also encouraged to take courses in the mathematics department; courses of particular interest are Mathematics 1808 (formerly 2108) (same as Biology 1174), 2000, 2020, 2109, 2206, 2208, 2209, 2302, 2502, 2601, and 2606.

Computer science shares interests with a number of other disciplines, e.g., probability and statistics in mathematics, logic in philosophy, and cognition in psychology. In addition, computers are increasingly being used as a tool in other disciplines, including the social sciences and the humanities as well as the natural sciences. The department encourages students to explore these relationships; courses that may be of particular interest include the mathematics courses listed above; Music 2551; Philosophy 2410, 2223, and 2233; and Psychology 2040 and 2740.

## Computer Science

## Requirements for the Minor in Computer Science

The minor consists of five courses: Computer Science 1101, 2101, and any three additional computer science courses at the intermediate level (numbered 2000-2969) or above.

## Interdisciplinary Major

The department participates in an interdisciplinary major program in computer science and mathematics. See page 77.

## Fulfilling Requirements

Courses that satisfy the Algorithms and Theory requirement: Computer Science 2210, 3225, 3250.

Courses that satisfy the Artificial Intelligence requirement: Computer Science 2400, 3400, 3415, 3420, 3445.

Courses that satisfy the Systems requirement: Computer Science 2300, 2310, 2325, 2505, 3325.
Courses that satisfy the Projects requirement: Computer Science 2325, 2505, 3225, 3325, 3415, 3445.

For courses at the 2000 level or above, a grade of C- or better must be earned in the course for it to serve as a prerequisite for another computer science course. Courses taken to fulfill major or minor requirements must be taken for regular letter grades (not Credit/D/Fail).

# Earth and Ogeanographig Scienge 

Philip Camill, Department Cbair<br>Marjorie L. Parker, Department Coordinator<br>Professors: Rachel J. Beane, Philip Camill (Environmental Studies), Collin S. Roesler $\dagger$<br>Associate Professor: Peter D. Lea<br>Assistant Professors: Emily M. Peterman†, Michèle G. LaVigne<br>Visiting Faculty: Christian Schrader, Meredith White<br>Laboratory Instructors: Cathryn Field, Joanne Urquhart

## Requirements for the Major in Earth and Oceanographic Science (EOS)

The major consists of ten courses. Majors may begin their study with any one of the introductory earth and oceanographic science courses: EOS 1105, 1305 (same as Environmental Studies 1104), 1505 (same as Environmental Studies 1102), or EOS 1515 (same as Environmental Studies 1515). Majors are required to take EOS 2005 (same as Environmental Studies 2221), and any one of the following: Biology 1102 or 1109; Chemistry 1102 or 1109; Computer Science 1101; Mathematics 1200, 1300, 1800, or 1808; or Physics 1140. To establish breadth within the major, students must take one core course with a laboratory (course numbers ending in 5) from each of the following three areas:

1. Solid Earth: EOS 2125, 2115, 2145, 2165, or 2215;
2. Earth Surface Processes: EOS 2335 or 2345 (same as Environmental Studies 2270), or 2315 or 2355 or 2365;
3. Oceans: EOS 2525, 2535, 2575, 2585 (same as Environmental Studies 2282), 2605, or 2635 (same as Environmental Studies 2267).

In addition, majors are required to take at least one research experience course (EOS 3115 or 3515 or 3625), and one senior seminar (EOS 3020 [same as Environmental Studies 3902], 3140, or 3520). The remaining two elective courses may be selected from earth and oceanographic science courses at the intermediate or advanced levels (numbered 2000-2969 or 3000-3999). One of these electives may include Biology 2319 (same as Environmental Studies 2229), 2325 (same as Environmental Studies 2225), 2574 (same as Environmental Studies 2274); Chemistry 3050 (same as Environmental Studies 3905), 3070 (same as Environmental Studies 3950); Computer Science 3225; Environmental Studies 2004; Physics 2250, 2510, 2810 (same as EOS 2810 and Environmental Studies 2253), 3810 (same as EOS 3050 and Environmental Studies 3957); or an approved off-campus study or summer field course.

Note that:
(a) only one course numbered 1100-1999 in earth and oceanographic science may be counted toward the major requirements;
(b) students may opt to begin the major with EOS 2005 (same as Environmental Studies 2221) having previously taken Biology 1102 or 1109, or Chemistry 1102 or 1109 . Such students may substitute an intermediate earth and oceanographic science laboratory course (numbered 2000-2969) or research experience course (EOS 3115 or 3515 or 3625) for the introductory EOS courses numbered 1100-1999;

## Earth and Ogeanographic Science

(c) independent studies do not count toward the major requirements; and
(d) all courses counted toward the major must be completed with a C - or better.

Students planning postgraduate study in earth and oceanographic science should note that they might present a stronger application if they take additional courses in the department and in the contributing sciences: biology, chemistry, computer science, mathematics, and physics. It is strongly advised that students consult with faculty on the design of their major and discuss the options of research projects through independent studies, fellowship-funded summer research, and honors projects.

## Interdisciplinary Majors

The department does not explicitly participate in formal interdisciplinary programs. However, the Departments of Earth and Oceanographic Science and Physics have identified major and minor pathways for students interested in majoring in earth and oceanographic science with an interest in physics (EOS major/physics minor) and students interested in majoring in physics with an earth and oceanographic science application (physics major/EOS minor). Students interested in an EOS major/physics minor with an interest in the solid earth discipline would be best served by selecting their optional physics courses from Physics 2130, $2150,2230,2250,2510,3000,3010,3020$; those with an interest in the surface earth discipline should choose from Physics 2130, 2220, 2230, 2810, 3010, 3020, 3810; those with an interest in the oceanography discipline should choose from Physics 2130, 2150, 2230, 2240, 2810, 3000, 3010, 3020, 3120, 3130, 3810.

## Requirements for the Minor in Earth and Oceanographic Science (EOS)

The minor consists of four courses in the department. Minors are required to take EOS 2005 (same as Environmental Studies 2221). No more than one introductory course numbered 1100-1999 in earth and oceanographic science may be included. All courses counted toward the minor must be completed with a C - or better.

## Egonomics

Guillermo Herrera, Department Chair<br>Elizabeth Weston, Department Coordinator<br>Professors: Rachel Ex Connelly, Deborah S. DeGrafft, John M. Fitzgerald, Jonathan P. Goldstein, B. Zorina Khan $\dagger$<br>Associate Professors: Gregory P. DeCoster, Guillermo E. Herrera, Stephen J. Meardon<br>Assistant Professors: Matthew J. Botsch, Stephen D. Morris, Erik Nelson, Gonca Senel, Daniel F. Stone†, Yao Tang<br>Visiting Faculty: Leslie Lipschitz, Julia Manzella

The major in economics is designed for students who wish to obtain a systematic introduction to the theoretical and empirical techniques of economics. It provides an opportunity to learn economics as a social science, to study the process of drawing inferences from bodies of data and testing hypotheses against observation, and to apply economic theory to particular social problems. Such problems include economic development, the functioning of economic institutions (e.g., financial markets, labor markets, corporations, government agencies), and current policy issues (e.g., the federal budget, poverty, the environment, globalization, deregulation). The major is a useful preparation for graduate study in economics, law, business, finance, or public administration, but majors have gone on to medicine, environmental policy, and many other fields.

## Requirements for the Major in Economics

The major consists of three core courses (Economics 2555, 2556, and 2557); two advanced topics courses numbered in the 3000 s, at least one of which must be designated as a seminar; and two additional courses in economics numbered 2000 or higher. Only one of Economics 2301 and 3302 may be counted toward the economics major. Because Economics 1101 is a prerequisite for Economics 1102, and both are prerequisites for most other economics courses, most students will begin their work in economics with these introductory courses. Prospective majors are encouraged to take at least one core course by the end of the sophomore year, and all three core courses should normally be completed by the end of the junior year. Advanced topics courses normally have some combination of Economics 2555,2556 , and 2557 as prerequisites. Qualified students may undertake self-designed, interdisciplinary major programs or joint majors between economics and related fields of social analysis.

To fulfill the major requirements in economics, or to serve as a prerequisite for nonintroductory courses, a grade of C- or better must be earned in a course. Courses required for the major must be taken for regular letter grades (not Credit/D/Fail).

All prospective majors and minors are required to complete Mathematics 1600 or its equivalent prior to enrolling in the core courses. Students who aspire to advanced work in economics (e.g., an honors thesis and/or graduate study in a discipline related to economics) are strongly encouraged to master multivariate calculus (Mathematics 1800) and linear algebra (Mathematics 2000) early in their careers. Such students are also encouraged to take Mathematics 2606 instead of Economics 2557 as a prerequisite for Economics 3516. The Economics 2557 requirement is waived for students who complete Mathematics 2606 and Economics 3516. Students should consult the Department of Economics about other mathematics courses that are especially useful for advanced study in economics.

## Egonomics

## Interdisciplinary Major

The department participates in an interdisciplinary major in mathematics and economics. See page 79.

## Requirements for the Minor in Economics

The minor consists of Economics 2555 or 2556 and any two additional courses numbered 2000 or higher. Only one of Economics 2301 and 3302 may be counted toward the economics minor. To fulfill the minor requirements or to serve as a prerequisite for other courses, a grade of C - or better must be earned in a course. Courses required for the minor must be taken for regular letter grades (not Credit/D/Fail).

## Requirements for the Minor in Economics and Finance

The minor in economics and finance consists of Economics 2555, 2301, and 3302, and one additional course at the intermediate or advanced level selected from among Economics $2309,2323,2380,2556,2557,3305,3350,3509,3532,3533$, or an intermediate or advanced independent study as approved by the finance advisor. Since Economics 2555 is a prerequisite for Economics 3302 and other upper-level economics courses, prospective minors are encouraged to complete 2555 by the end of their sophomore year. To fulfill the minor requirements or to serve as a prerequisite for other courses, a grade of C - or better must be earned in a course. Courses required for the minor must be taken for regular letter grades (not Credit/D/Fail).

Economics majors cannot also minor in economics and finance. Economics majors who complete the requirements for this minor will be provided validation by the department to enable them to indicate that they have done so.

# Education 

Charles Dorn, Department Chair
Lynn A. Brettler, Department Coordinator

Associate Professors: Charles Dorn, Nancy Jennings $\dagger$, Doris A. Santoro $\dagger$<br>Assistant Professor: Alison Miller<br>Visiting Assistant Professor: Sarah Butler Jessen<br>Lecturers: Kathleen O’Connor, Erika Stump

Bowdoin College does not offer a major in education.

## Requirements for the Minor in Education

The department offers two minors: an education studies minor for students who wish to develop an understanding of the traditions of education-to its history and philosophy, and its interrelationships with other cultural and social institutions; and a teaching minor for students who plan to teach in some capacity following graduation. Four courses are required for the education studies minor: Education 1101; three from among Education 2204, 2206 (same as Sociology 2206), 2211, 2212 (same as Gay and Lesbian Studies 2120 and Gender and Women's Studies 2282), 2221, 2250 (same as Government 2940), 2260, 2272, and 2285. One independent study credit, study away course, or course from another department that is not cross-listed with education may be used to complete the education studies minor with department approval. Four courses are required for the teaching minor: Education 1101, 2203, 3301, and 3302. Courses that will count toward either minor must be taken for regular letter grades (not Credit/D/Fail). Students must earn a grade of C- or better in order to have a course count toward either minor in education. Students must earn a grade of C- or higher in all prerequisite courses.

## Bowdoin Teacher Scholars Program

The Bowdoin Teacher Scholars are a select group of Bowdoin undergraduates and graduates who embrace the College's commitment to the common good by becoming teachers through a rigorous scholarly and classroom-based preparation.

The Teacher Scholars:

1. Complete a full-time, fourteen-week, student-teaching practicum in a public school;
2. Participate in an introspective weekly seminar;
3. Develop a professional portfolio;
4. Receive a Maine State initial teacher certification, with highly qualified status;
5. Gain access to the Boston, New York, and Philadelphia Teaching Induction Programs sponsored by the Consortium for Excellence in Teacher Education.

To become a Teacher Scholar, a student must apply for candidacy through the Department of Education, be a community member in good standing as verified by dean's review, and have a strong academic record. A cumulative 3.0 grade point average is required as well as a 3.0 grade point average in Education 3301 and Education 3302. Subject areas of certification include mathematics, life science, physical science, English, world languages, and social studies. Since majors at Bowdoin do not correspond directly with subject areas for public school certification, students are strongly encouraged to meet with a member of the education department early in their college careers.

## Education

## Content Area Requirement for Bowdoin Teacher Scholars

Social Studies: Six courses in history (at least two of which must be non-US) and one course each in two of the following departments: anthropology, economics, government, psychology, or sociology.

English: Eight courses in English.
Mathematics: Eight courses in mathematics.
World Languages: Eight courses in the language in which certification is sought.
Life Science: Six courses in biology and two additional courses in biology, biochemistry, or neuroscience.

Physical Science: Six courses in one of the following: chemistry, earth and oceanographic science, or physics, and one course in each of the other two departments.

Also note that teaching candidates must be fingerprinted and earn a passing score on all examinations specified by the Maine Department of Education. Since this requirement was first instituted, Bowdoin students' pass rate has been 100 percent.

## Pathways

Bowdoin Teacher Scholars follow one of two pathways. In the first, students participate in the program as undergraduates during the spring semester of their junior or senior year. In the second, they participate in the program during a spring semester within two years following their Bowdoin graduation.

## Undergraduate Pathway

By the end of the fall semester of their junior or senior year, Teacher Scholars:

1. Complete prerequisite coursework in education (Education 1101, 2203, 3301, and 3302) and in the chosen content area.

During the spring semester of their junior or senior year, Teacher Scholars:
2. Complete a full-time, fourteen-week practicum (students receive course credit for this practicum through Education 3303: Student Teaching Practicum);
3. Enroll in Education 3304: Bowdoin Teacher Scholars Seminar.

## Postgraduate Pathway

By the time they graduate from Bowdoin, Teacher Scholars:

1. Complete prerequisite coursework in Education (Education 1101, 2203, 3301, and 3302) and in the chosen content area.

During a spring semester and within two years of their Bowdoin graduation, Teacher Scholars:
2. Complete a full-time, fourteen-week practicum (students receive course credit for this practicum through Education 3303: Student Teaching Practicum);
3. Enroll in Education 3304: Bowdoin Teacher Scholars Seminar.

## Interdisciplinary Major

The department participates in an interdisciplinary joint major entitled mathematics and education. See page 79.

## English

Aaron Kitch, Department Cbair
Laurie Holland, Department Coordinator
Professors: Aviva Briefel (Cinema Studies), Brock Clarke, David Collingst, Celeste Goodridge, Marilyn Reizbaum
Associate Professors: Tess Chakkalakal (Africana Studies), Guy Mark Foster, Ann Louise Kibbie, Aaron Kitch, Belinda Kong (Asian Studies), Elizabeth Muther
Assistant Professors: Emma Maggie Solberg, Hilary Thompson
Writer in Residence: Anthony E. Walton
Visiting Faculty: Russell Rymer
Fellow: Morten Hansen

## Requirements for the Major in English and American Literature

The major requires a minimum of ten courses. Each student must take one first-year seminar (English 1000-1049) or introductory course (English 1100-1999). At least three of the ten courses must be chosen from offerings in literature written in the English language before 1800. The individual courses that satisfy this requirement are identified by a note in the course description. Only one of these three courses may be a Shakespeare drama course, and only one may be a Chaucer course. Only one transfer course may count toward this requirement. Also, each student must take at least one intermediate seminar (English courses numbered 2000-2049) and one advanced seminar in the department (any English course numbered 3000-3999). Students may, when appropriate, also count the advanced seminar toward one of the requirements listed above. Transfer credits will not count for the advanced seminar requirement. The remaining courses may be selected from the foregoing and/or first-year seminars; Introductory or Advanced Creative Writing; intermediate or advanced Literary Analysis (numbered 2000 or higher); Independent Study; and Advanced Independent Study/ Honors (numbered 4000-4051). Majors who are candidates for honors must write an honors essay and take an oral examination in the spring of their senior year.

No more than two creative writing courses may count toward the major and no more than two courses may come from the department's selection of first-year seminars and introductory courses (not including 1000-level creative writing courses). A maximum of two courses from outside of the department may be counted toward the major. One of these may be a course in cinema studies at the 2000 level or above. Courses taken in a foreign literature, either at Bowdoin or abroad, may be counted toward the major with the approval of the chair. English Composition (English 1060) and courses in expository writing, journalism, and communication do not count toward the major.

First-year seminars in English composition and literature are open to first-year students; they offer extensive practice in reading and writing analytically. Each seminar is limited to sixteen students and includes discussion, outside reading, frequent papers, and individual writing conferences. For a full description of first-year seminars, see First-Year Seminars in the Course Guide. Introductory courses in literature (English 1100-1199) require no prerequisites and are intended for first- and second-year students and for juniors and seniors with no prior experience in college literature courses. Intermediate seminars in literature (English 20002049) are limited to sixteen students. Each intermediate seminar explores a unique topic and provides opportunities for students to focus intensively on critical reading and writing skills and learn advanced research methods. Other intermediate-level English courses (English 2100-2899) are limited to thirty-five students. Intermediate seminars and intermediate-level

## English

courses require no prerequisites and are open to all majors and non-majors, except for firstsemester first-year students. English courses numbered 3000-3999 are advanced seminars. They are limited to sixteen students and require prerequisites. Their content and perspective vary, although they typically employ extensive reading in primary and secondary materials and require students to complete a substantive research project.

## Interdisciplinary Major

The department participates in an interdisciplinary major in English and theater. See page 77.

## Requirements for the Major in English with Concentration in Creative Writing

English majors with a concentration in creative writing must satisfy the requirements for the major, including an introductory-level and an intermediate- or advanced-level creative writing course in a single genre (poetry or fiction), and an additional elective course in creative writing. Two of these creative writing courses may be the two allowed within the ten courses required for the major, with an additional creative writing course above the ten required (for a total of eleven courses).

## Requirements for the Minor in English and American Literature

The minor requires five courses taken within the department, including one first-year seminar (English 1000-1049) or introductory course (English 1100-1999). At least three of the remaining four courses must be numbered 2000 or higher. No more than one creative writing course may count toward the minor and English composition (English 1060) will not count. Students may not apply transfer credits to the minor.

## First-Year Seminars in English Composition and Literature

These courses are open to first-year students. The main purpose of the first-year seminars (no matter what the topic or reading list) is to give first-year students extensive practice in reading and writing analytically. Each seminar is normally limited to sixteen students and includes discussion, outside reading, frequent papers, and individual conferences on writing problems. For a full description of first-year seminars, go to bowdoin.edu/classfinder.

## Introductory Courses in Literature

1100-1199. Primarily intended for first- and second-year students, and for juniors and seniors with no prior experience in college literature courses. (Specific content and focus of each course will vary with the instructor.)

## Intermediate Seminars in English and American Literature

These seminars are open to both majors and non-majors-and are normally limited to sixteen students. They provide opportunities for students to focus intensively on critical reading and writing skills and to learn advanced research methods. Each seminar explores a unique topic while introducing students to literary theory and other critical paradigms and tools of literary studies. These seminars are not open to first-year students in their first semester.

## Advanced Seminars in English and American Literature

3000-3999. Advanced Literary Study.
English courses (numbered 3000-3999) are advanced seminars. Students who take them are normally English majors and are strongly encouraged to take one intermediate seminar (at
the 2000 level) before registering for these courses. Their content and perspective varies-the emphasis may be thematic, historical, generic, biographical, etc. All require extensive reading in primary and collateral materials.

## Major/Minor Grade Policy

Courses that will count toward the major and minor must be taken for a grade (not Credit/D/ Fail), and students must earn grades of C - or better in these courses.

## Environmental Studies

John Lichter, Program Director<br>Eileen Sylvan Johnson, Program Manager<br>Rosemary Armstrong, Program Coordinator

Professors: Philip Camill (Earth and Oceanographic Science), John Lichter** (Biology), Dharni Vasudevan (Chemistry)
Associate Professors: Connie Y. Chiang (History), Matthew W. Klingle (History), Lawrence H.
Simon** (Philosophy)
Senior Lecturer: Jill E. Pearlman
Lecturers: Eileen Sylvan Johnson, Conrad Schneider
Fellow: Shaun Golding
Contributing Faculty: Jennifer Baca, Mark O. Battle, David Carlon, David Collingst, Vladimir Douhovnikoff*, Damon P. Gannon, Divya Gupta, Natasha Goldman, Laura A. Henry, Guillermo Herrera, Sree Holt, Amy S. Johnson, Susan A. Kaplan, Michèle G. LaVigne, Peter D. Lea, Barry Logan, Marcos Lopez, Sarah F. McMahon, Erik Nelson, Emily Peterman $\dagger$, Nancy E. Riley, Collin Roeslert, Allen L. Springer*, Anthony Walton, Allen Wells, Nathaniel T. Wheelwright, Enrique Yepes, Mary Lou Zeeman

## Requirements for the Coordinate Major in Environmental Studies

Among Bowdoin's major programs, the coordinate major is unique to the Environmental Studies Program. To receive a major in environmental studies, a student must also have a disciplinary major, either in the Department of Biology, Economics, History, etc., or in the Asian Studies Program, or the Gender, Sexuality, and Women's Studies Program, etc. A maximum of two courses taken to satisfy the College's distribution requirements or to fulfill the requirements of the second major may be double-counted toward the environmental studies major requirements, except as noted. A grade of C- or better must be earned in a course to fulfill the major requirement.

Completion of the environmental studies major requires the following courses:

1. Introductory, interdisciplinary course: Environmental Studies 1101, Our Earth: Introduction to Environmental Studies, preferably taken as a first-year student.
2. One introductory course (numbered 1100 or higher) in biology, chemistry, earth and oceanographic science, or physics.
3. One environmental science course: Environmental Studies 2201, Perspectives in Environmental Science (same as Biology 1158 and Chemistry 1105).

## Environmental Studies

4. One environmental social science course chosen from environmental studies courses numbered 2300-2330. Please check the Environmental Studies Program website for current courses satisfying this requirement.
5. One environmental humanities course: Environmental Studies 2403, Environment and Culture in North American History (same as History 2182).
6. One senior seminar chosen from environmental studies courses numbered 3900-3999: a culminating course that provides an opportunity for exploration of a topic or a senior capstone course experience of one semester. Such courses are multidisciplinary, studying a topic from at least two areas of the curriculum. It is preferable to take this course during the senior year. Please check the Environmental Studies Program website for an updated list of courses satisfying this requirement.
7. Beyond the core courses, students must choose a concentration (listed below):

Environmental Studies Disciplinary Concentrations: For this option, environmental studies coordinate majors must take three courses (numbered 1100) or above within one of the following concentrations:
—for History, Landscape, Values, Ethics, and the Environment, students choose from environmental studies humanities courses designated with a "c";
-for Environmental Economics and Policy, students choose environmental studies social science courses designated with a "b";
-for the Interdisciplinary Environmental Science Concentration, students choose environmental studies natural science courses designated with an "a" (in addition, Chemistry 2100, Chemical Analysis, and Chemistry 2400, Inorganic Chemistry, count toward this concentration). Environmental studies majors are strongly advised to take one of the environmental studies science courses outside of their departmental requirements. Environmental studies science majors should consult with their environmental studies science advisor in identifying a science course outside their major.

Student-designed Environmental Studies Concentration: Students majoring in environmental studies have the option of designing their own concentration consisting of three courses in addition to the core courses and senior seminar. Student-designed concentrations are particularly appropriate for students interested in exploring environmental issues from a cross-divisional perspective. Students must submit a self-designed concentration form (available from the program), explaining their plan of study to the program director by the first week of the first semester of the junior year, listing the three courses proposed, and explaining how the courses are related to the issue of interest to the student. Proposals must be approved by the program director.

## Requirements for the Minor in Environmental Studies

The minor consists of five courses: Environmental Studies 1101; two intermediate courses (numbered 2000-2969) or higher, one of which should be outside a student's departmental major; and two core courses in the disciplinary area as specified below. A maximum of two courses taken to satisfy the College's distribution requirements or to fulfill the requirements of the second major may be double-counted toward the environmental studies minor requirements, except as noted. A grade of C- or better must be earned in a course to fulfill the minor requirement.
-for natural science majors: Environmental Studies 2403, Environment and Culture in North American History (same as History 2182), and one social science course from environmental studies courses numbered 2300-2330.
-for social science majors: Environmental Studies 2201, Perspectives in Environmental Science (same as Biology 1158 and Chemistry 1105), and Environmental Studies 2403, Environment and Culture in North American History (same as History 2182).
-for bumanities majors: Environmental Studies 2201, Perspectives in Environmental Science (same as Biology 1158 and Chemistry 1105), and one social science course from environmental studies courses numbered 2300-2330.

# Gender, Sexuality, and Women's Studies* 

Frances Gouda, Marilyn Reizbaum, Transitional Program Directors<br>Anne E. Clifford, Program Administrator<br>Professors: Kristen R. Ghodseet, Jennifer Scanlon<br>Visiting Faculty: Susan Faludi, Frances Gouda<br>Fellows: Brittany Lewis, Karla Padron

Contributing Faculty: Todd Berzon, Aviva Briefel, Judith S. Casselberry, Lindsay Ceballos, David Collingst, Sarah Conly, Rachel Connelly, Sara Dickey, Pamela Fletchert, Guy Mark Foster, Celeste Goodridge, David Hecht, Sree Padma Holt, Ann Kibbie, Aaron Kitch, Matthew Klingle, Tracy McMullen, Kristi Olson, Elizabeth Pritchard, Marilyn Reizbaum, Nancy Riley, Jill Smith, Rachel Sturman, Susan Tananbaum, Birgit Tautz, Shu-chin Tsui, Hanétha VétéCongolo, Krista Van Vleet $\dagger$, Tricia Welsch
*Beginning in the fall of 2015, the Gender and Women's Studies Program (GWS) and Gay and Lesbian Studies Program (GLS) will merge into the Gender, Sexuality, and Women's Studies Program (GSWS). Students currently enrolled as GWS majors or as GLS or GWS minors will bave the option of declaring in the new major/minor. For the Class of 2019, students will enroll as GSWS majors or minors.

The interdisciplinary Gender, Sexuality, and Women's Studies Program curriculum incorporates recent research on women, sexuality, and gender. GSWS combines the scholarly traditions of each field in new and productive ways to develop a culture of critical thinking about sexuality, gender, race, and class. Courses in GSWS investigate the experience of women and men in light of the social construction of gender and its meaning across cultures and historic periods. Gender construction is explored as an institutionalized means of structuring inequality and dominance. The program offers a wide range of courses taught by faculty members from many departments and programs.

## Requirements for the Major in Gender and Women's Studies

The major consists of nine courses, including three required core courses-Gender and Women's Studies 1101, 2201 or Gay and Lesbian Studies 2001, and an advanced-level capstone seminar (numbered 3000-3999) - that are designed to illuminate the diverse realities of women's experience while making available some of the main currents of feminist thought.

The six remaining courses for the major may be chosen from the set of GWS courses, or from a set of courses in other disciplines that have been approved by the Gender, Sexuality, and Women's Studies Program Committee to count toward the major. GWS courses are numbered to indicate the level of course instruction. The general level of instruction is indicated by the first number, so that courses numbered 1000-1049 are first-year seminars, those numbered 1100-1999 are introductory courses, those numbered 2000-2969 are intermediate-level courses, and those numbered 3000-3999 are advanced seminars intended for juniors and seniors.
In total, no more than three of the six elective courses may be from any single department outside of GWS. The departmental affiliation of the course is considered the department of which the instructor is a member. Courses will count toward the major if grades of C- or better are earned. One course taken with the Credit/D/Fail grading option may count for the major as long as a CR (Credit) grade is earned for the course.

During the spring of their junior year, students who wish to undertake an honors project must secure the agreement of a faculty member to supervise their independent study project. The honors project supervisor must have taught GWS courses and served on the Gender, Sexuality, and Women's Studies Program Committee. If the student's chosen supervisor has not fulfilled both of these requirements, the student may appeal for permission from that committee. Two semesters of advanced independent work (Gender and Women's Studies 4000 and 4001) are required for an honors project in GWS. No more than two independent study courses may count toward the major.

## Requirements for the Minor in Gender and Women's Studies

The minor consists of Gender and Women's Studies 1101 and 2201, normally taken in the first or second year, and three additional courses. With the agreement of the major department, students may count one of their major courses for this minor. Only two courses from any single department outside of GWS will count toward the minor. All courses must be taken for regular letter grades (not Credit/D/Fail) and students must earn a grade of C- or better in order for a course to count toward the minor.

## Requirements for the Minor in Gay and Lesbian Studies

The minor consists of five courses: Gay and Lesbian Studies 2001 and four other courses cross-listed with GLS, some of which will change with every academic year. Among the latter four courses, at least one must come from the social sciences and at least one from the arts and humanities divisions, and no more than two courses may come from any single department. Only one independent study may be counted toward the minor. Students must earn a grade of C - or better in order to have a course count toward the minor.

## German

Birgit Tautz, Department Chair
Kate Flaherty, Department Coordinator
Associate Professors: Jill S. Smith, Birgit Tautz
Assistant Professor: Jens Klenner
Teaching Fellow: Alexander Grundhöfer
The German department offers courses in the language, literature, and culture of the German-speaking countries of Europe. The program is designed for students who wish to become literate in the language and culture, comprehend the relationship between the language and culture, and gain a better understanding of their own culture in a global context. The major is a valuable asset in a wide variety of postgraduate endeavors including business, science, and international careers; and in law and graduate school.

## Requirements for the Major in German

The major consists of eight courses, one of which is German 2204 or the equivalent. One course may be chosen from 1151-1156 or German 2251, and the others from 2205-4001. A course taught by German faculty in other programs may be substituted for the one from 1151-1156 upon prior approval. All majors are required to do course work with the department in their senior year; the configuration of this senior work must be determined in direct consultation with the department. This consultation takes place prior to registering for the fall semester of senior year, which for some students means before they depart for study away. 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 a number of study-abroad programs with different calendars and formats.

## Requirements for the Minor in German

The minor consists of German 1102 or the equivalent, plus any four courses, of which two must be in the language (2203-2289 and 3300-3999).

Courses that will count toward the major or minor must be taken for regular letter grades (not Credit/D/Fail).

# Government and Legal Studies 

Michael M. Franz, Department Cbair<br>Lynne P. Atkinson, Department Coordinator<br>Professors: Paul N. Franco, Janet M. Martint, Christian P. Potholm, Andrew C. Rudalevige, Allen L. Springer, Jean M. Yarbrough<br>Associate Professors: Ericka A. Albaugh, Michael M. Franz, Laura A. Henry, Henry C. W. Laurence (Asian Studies)<br>Assistant Professors: Barbara Elias, Christopher Heurlin* (Asian Studies), Jeffrey S. Selinger<br>Lecturer: George S. Isaacson<br>Visiting Faculty: Divya Gupta (Environmental Studies)<br>Tallman Scholar: Kenneth I. Kersch<br>Fellow: Cory C. Gooding

Courses within the department are divided into three levels:

## Level A Courses (Government 1000-1999)

First-Year Seminars
All first-year seminars offered by the department 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. Registration is limited to sixteen first-year students in each seminar.

## Introductory Lectures

Government 1100, 1400, and 1600 are large lecture courses, limited to fifty students each, and designed to provide a substantive introduction to American politics, comparative politics, or international relations, respectively. These courses are intended for first-year students and sophomores. Others may take them only with the permission of the instructor.

## Level B Courses (Government 2000-2999)

Courses designed to introduce students to or extend their knowledge of a particular aspect of government and legal studies. Courses range from the more introductory to the more advanced. Registration is limited to thirty-five students in each course. Students should consult the individual course descriptions regarding any prerequisites.

## Level C Courses (Government 3000-3999)

Courses provide seniors and juniors with appropriate background the opportunity to do advanced work within a specific subfield. Registration is limited to fifteen students in each seminar. These courses are not open to first-year students. Students should consult the individual course descriptions regarding any prerequisites.

## Requirements for the Major in Government and Legal Studies

Courses within the department are divided into four sub-fields. Every major is expected to complete an area of concentration in one of these sub-fields:
American politics: Government 1000-1009, 1037-1039, 1100, 2000-2199, 2700-2799, 30003199, and 3700-3799.

Comparative politics: Government 1017-1029, 1400, 2300-2599, and 3300-3599.
Political theory: Government 1007-1019, 1040-1045, 2100-2399, 2800-2899, 3100-3399, and 3800-3899.

International relations: Government 1025-1045, 1600, 2500-2899, 3500-3899.
The major consists of nine courses, with no more than two taken at Level A, and no more than one of these a first-year seminar, distributed as follows:

1. A field of concentration, selected from the above list of sub-fields, in which at least four courses including one Level C course and no more than one Level A course are taken.
2. At least one course in each of the three sub-fields outside the field of concentration. These courses may be at Levels A, B, or C, though only two Level A courses may count toward the major and no more than one of these may be a first-year seminar.

The following courses, while not fulfilling the requirement for any of the four fields of concentration, may be counted toward the total number of courses required for the major or minor: Government 2900-2969, 3900-3999, and Environmental Studies 2304.

Students seeking to graduate with honors in government and legal studies must petition the department. 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 nine-course departmental requirement and the four-course field concentration. Students who hope to graduate with honors in government and legal studies thus normally must complete at least ten courses in the department.

To fulfill major requirements, a grade of C - or better must be earned in a course. Courses used to fulfill major requirements must be taken for regular letter grades (not Credit/D/Fail).

A total of 2 credits from outside Bowdoin can normally be applied to the government major. Only 1 credit can be applied (as a Level B course) to the four-course major concentration requirement. The Level C concentration requirement must be completed at Bowdoin.

## Requirements for the Minor in Government and Legal Studies

A minor in government and legal studies consists of five courses from at least three of the departmental sub-fields. No more than two Level A courses, with no more than one of these a first-year seminar, may count toward the minor.

To fulfill minor requirements, a grade of C - or better must be earned in a course. Courses used to fulfill minor requirements must be taken for regular letter grades (not Credit/D/Fail). A total of 2 credits from outside Bowdoin can normally be applied to the government minor.

# History 

Dallas G. Denery II, Department Chair
Rebecca Banks, Department Coordinator

Professors: Dallas G. Denery II, David M. Gordon, Patrick J. Rael, Susan L. Tananbaum, Olufemi Vaughan (Africana Studies), Allen Wells
Associate Professors: Connie Y. Chiang (Environmental Studies), K. Page Herrlinger, Matthew W. Klingle (Environmental Studies), Sarah F. McMahon, Brian Purnell (Africana Studies), Rachel L. Sturman (Asian Studies)

Assistant Professors: David K. Hecht, Meghan Roberts, Ya (Leah) Zuo† (Asian Studies) Instructor: Sakura Christmas (Asian Studies) Visiting Faculty: Strother Roberts

## Requirements for the Major in History

History offers courses in the following fields of study: Africa, East Asia, Europe, Latin America, South Asia, the United States, Atlantic Worlds, and Colonial Worlds. Multi-field courses fall into more than one of these fields of study.

Before electing to major in history, a student should have completed or have in progress at least two college-level courses in history. In consultation with a faculty advisor in the department, a student should plan a program that begins at either the introductory or the intermediate level and progresses to the advanced level.

The major consists of ten courses, with the following stipulations:

1. No more than two courses below the intermediate level (numbered below 2000) may count toward the major, and these must be taken prior to the junior year.
2. No more than six courses in a single field of study may count toward the major. A multifield course may count toward any one of its designated fields.
3. Non-Euro/US courses: Three non-Euro/US courses. These courses are designated by professors and noted in the course descriptions. The department also maintains a list of these courses, which is available on the department website.
4. Pre-modern course: One pre-modern course. These courses are designated by professors and noted in the course descriptions. The department also maintains a list of these courses, which is available on the department website.
5. Upper-level seminars: Three courses numbered 2500 or higher. This includes intermediate seminars (2500-2999), advanced research seminars (3000s), advanced independent studies, or honors ( 4000 s ). One of the three upper-level seminars must be a 3000 -level capstone seminar. In consultation with a faculty advisor, a major may fulfill this requirement with an honors project.

Grades: Students must obtain a minimum course grade of C- to receive credit toward the major. Courses that will count toward the major must be taken for regular letter grades (not Credit/D/Fail).

Study away: In their sophomore year, students anticipating study away from Bowdoin should discuss with the departmental advisor a plan for the history major that includes work at Bowdoin and elsewhere. Students participating in approved off-campus study may count no
more than one history course per semester toward the history major. In exceptional cases, students may petition to receive credit for more than one course per semester toward the history major. In all cases, a maximum of three history courses taken away from Bowdoin may count toward the history major.

Honors: All history majors seeking departmental honors will register for at least one semester of advanced independent study (which will be converted to an Honors Project after honors is awarded). Its primary requirement is the research and writing of the honors thesis. To be eligible to register for honors, a student must have the equivalent of a $B+$ average in courses taken in the department and the approval of a thesis advisor.

Languages: 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.

Advanced Placement Credits: Students who received a 4 or higher on an Advanced Placement history exam must complete a history course at the 2000 level or higher with a minimum grade of B in order to receive a college credit for the exam. AP credits do not count towards the history major or any college requirements; credits from AP exams only count towards total credits needed for graduation. If a student has scores for more than one AP history exam, only one total credit will be awarded.

## Requirements for the Minor in History

The minor consists of five courses with the following stipulations:

1. A maximum of one course below the intermediate level (numbered below 2000) which must be taken prior to the junior year.
2. A maximum of one course may be taken at another institution (may not count as an intermediate seminar or higher).
3. One course must be taken at the level of intermediate seminar or higher (course must be taken at Bowdoin).
4. One course must be non-Euro/US.
5. Courses that will count toward the minor must be taken for regular letter grades (not Credit/D/Fail).

## Curriculum

First-year seminars (1000-1049) introduce students to college-level writing through the study of history as a discipline. Registration is limited to sixteen students in each seminar. First-year seminars numbered 1028-1049 fulfill the non-Euro/US requirement for the history major.

Introductory courses (1100-1999) introduce students to the methods and skills of history as a humanities and social science discipline. (Generally closed to seniors.) Introductory 1000-level courses numbered 1370-1999 fulfill the non-Euro/US requirement for history majors.

Core courses (2000-2499) survey historical themes and problems and offer opportunities to deepen skills in historical thinking and writing. (Open to all students, including first-year students.) Core courses numbered 2270-2499 fulfill the non-Euro/US requirement for history majors.

Intermediate seminars (2500-2999) offer the opportunity for more intensive work in critical reading and discussion, analytical writing, library or archival research, and methodology. (Not open to first-year students without instructor's permission; some background in the discipline assumed.) Seminars numbered 2740-2899 fulfill the non-Euro/US requirement for history majors.

## History/Interdisciplinary Majors

Advanced seminars (3000-3999) expect students to build on prior coursework by developing a substantial piece of historical research. (Not open to first-year students without instructor's permission.) Seminars numbered 3270-3999 fulfill the non-Euro/US requirements for history majors.

## Interdisciplinary Majors ${ }^{1}$

## Art History and Archaeology

## Requirements

1. Art History 1100; one of Art History 2130, 2140, or 2150; and one of Art History 3000-3999; Archaeology 1101 (same as Art History 2090), 1102 (same as Art History 2100), and any three additional archaeology courses, at least one of which must be at the advanced level (numbered 3000-3999).
2. Art History 2220
3. Any two art history courses.
4. One of the following: Classics 1101, 1111(same as History 1111), 1112 (same as History 1112), or 2970-2973 (Independent Study in Ancient History); Philosophy 2111; or an appropriate course in religion at the intermediate level (numbered 2000-2969).
5. Either Art History 4000 or Archaeology 4000.

## Art History and Visual Arts

## Requirements

1. Art History: 1100; one course in African, Asian, or pre-Columbian art history numbered 1103 or higher; four additional courses numbered 2000 or higher; and one advanced seminar (numbered 3000-3999).
2. Visual Arts: 1101; and one of 1201, 1401, or 1601; plus four other courses in the visual arts, no more than one of which may be an independent study.

## Chemical Physics

## Requirements

1. Chemistry 1102 or 1109, 2510; Mathematics 1600, 1700, and 1800; Physics 1130, 1140, 2130 , and 2150.
2. Either Chemistry 2520 or Physics 3140.
3. Two courses from Chemistry 3100, 3400, or approved topics in 4000 , or higher; Physics 2250, 3000, 3130, 3810 (same as Earth and Oceanographic Science 3050 and Environmental Studies 3957), or approved topics in 4000 or 4001 . At least one of these must be at the advanced level (numbered 3000-3999). Other possible electives may be feasible; interested students should check with the departments.
${ }^{1}$ An interdisciplinary major cannot be combined with a second major.

## Computer Sgienge and Mathematics

## Requirements

1. Computer Science 1101, 2101, and 2200.
2. Mathematics 1800, 2000, and 2020.
3. Three additional computer science courses that satisfy the following requirements: at least one course in each of the areas Artificial Intelligence and Systems, and at least one advanced course (numbered 3000-3999).
4. Two additional mathematics courses from: 1808 \{formerly 2108\} (same as Biology 1174), $2109,2206,2208,2209,2601,2602,2606,3209,3404$, and 4000. An independent study may be applied to the major upon approval of the appropriate department.
5. Each course submitted for the major must be passed with a grade of C- or better.

## English and Theater

The interdisciplinary major in English and theater focuses on the dramatic arts, broadly construed, with an emphasis on the critical and embodied study of drama and literature.
Students of English and theater may blend introductory and advanced course work in both fields, while maintaining flexibility in the focus of their work. Students who decide to take this major are encouraged to work with advisors in both fields. Honors theses in English and theater are listed as honors in both departments. Students completing an honors project should be guided by faculty in both fields. Students who decide to take this major are encouraged to work with advisors in both fields. Students wishing to study abroad are allowed to count two courses in approved study away programs toward the requirements for the major.

## Requirements

1. An English first-year seminar or introductory course (numbered 1100-1999).
2. One introductory theater course (numbered 1100-1999).
3. One course from English on drama before 1800, such as English 1115, English 2200, or the equivalent in English or another department.
4. One course in modern drama, such as English 2452, 2654, or the equivalent in English or another department.
5. One advanced course in theater (numbered 3000-3999), and one advanced English seminar (numbered 3000-3999).
6. One elective in English at the intermediate level (2000-2899)
7. One elective in theater or dance at the intermediate level (2000-2999).
8. Any three additional courses in theater.

## Eurasian and East European Studies

The interdisciplinary major in Eurasian and East European studies (EEES) combines the study of the Russian language with related courses in anthropology, economics, German, government, history, music, and gender and women's studies. The major emphasizes the common aspects of the geo-political area of Eurasia and East Europe, including the European and Asian countries of the former USSR, East Central Europe, and the Balkans. The EEES major allows students to focus their study on one cultural, social, political, or historical topic, illuminating the interrelated linkages of these countries.

This major combines multiple fields into a study of one common theme, in order to provide a multidisciplinary introduction to the larger region, while allowing for an in-depth study of the student's specific geographical area of choice. EEES independent study allows an interested student to work with one or more faculty members in order to merge introductory and advanced course work into a focused and disciplined research project. Course work in the Russian language or other regional languages is expected to start as early as possible in the student's academic career.

Careful advising and consultation with EEES faculty members is essential to plan a student's four-year program, taking into consideration course prerequisites, the rotation of courses, and/or sabbatical or research leaves. Independent study allows a student to conduct interdisciplinary research under the careful guidance of two or more advisors or readers.

## Requirements

1. Two years of Russian (Russian 1101, 1102, 2203, 2204), or the equivalent in another language (i.e., Slovene, Serbian/Croatian).
2. Four courses from the concentration core courses after consultation with EEES faculty. At least one course should be at the intermediate level (numbered 2000-2969) and one at the advanced level (numbered 3000-3999). Upon petition to EEES faculty, a student completing the EEES concentration can satisfy the requirement by substituting a course from the complementary list of Russian courses (listed below) or through independent studies in those cases in which (1) faculty members are on sabbatical leave, (2) the course is not rotated often enough, (3) a course is withdrawn (as when a faculty member leaves), and/or (4) a new, related course is offered on a one-time-only basis.
3. Any two courses outside the EEES concentration to be selected from the complementary list below, one at the intermediate level (numbered 2000-2969) and one at the advanced level (numbered 3000-39999). With approval of an EEES faculty member, requirements (2) and (3) may be fulfilled in part by an independent study in the concentration or in the area of complementary courses.
4. Only one introductory course or first-year seminar may count toward the major.
5. An honors project in either concentration requires two semesters of independent study for a total of eleven courses in the major. EEES offers three levels of honors.
6. Off-campus study in an approved program is strongly recommended. Up to three courses in an approved program may be counted toward the major.

EEES Concentration Core and Complementary Courses (beyond Russian 2204):

[^0]Core courses:
Economics 2221 b - MCSR, ESD. Marxian Political Economy
Gender and Women's Studies 2600 b. Gender and Sexuality in Contemporary Eastern Europe
[Government 2410 b. Post-Communist Russian Politics and Society]
[Government 3510 b. Post-Communist Pathways]
History 2108 c - ESD, IP. The History of Russia, 1725-1924
[History 2109 c - ESD, IP. Russia's Twentieth Century: Revolution and Beyond]
B. Complementary Courses in Eurasian and East European Literature and Culture

German 1151 c - ESD. The Literary Imagination and the Holocaust
[German 3317 c - IP. German Literature and Culture since 1945]
Music 2773 c. Chorus (when content applies)
Russian 1022 c. "It Happens Rarely, Maybe, but It Does Happen"-Fantasy and Satire in East Central Europe
Russian 2220 c - IP. Nineteenth-Century Russian Literature
Russian 2221 c - IP, VPA. Soviet Worker Bees, Revolution, and Red Love in Russian Film (same as Gender and Women's Studies 2510)
Russian 2223 c. Dostoevsky and the Novel (same as Gender and Women's Studies 2221)
Courses in Russian:
Russian 3077 c. Russian Folk Culture
Russian 3099 c. Nineteenth-Century Russian Literature
Russian 3100 c. Modern Russian Literature
Russian 3166 c. Russian Poetry

## Mathematics and Egonomics

## Requirements

1. Six courses in mathematics as follows: Mathematics 1800, 2000, 2206, 2606; and two of Mathematics 2109, 2208, 3108, 3109, 3208, 3209.
2. Either Computer Science 2101 or Mathematics 2209 or 3606.
3. Economics $2555,2556,3516$, and one other advanced course (numbered 3000-3999).
4. Each course submitted for the major must be passed with a grade of C - or better.

## Mathematics and Education

The interdisciplinary major in mathematics and education combines the study of mathematics and pedagogy. The prescribed mathematics courses represent the breadth of preparation necessary for both the scholarly study as well as the practice of secondary school mathematics. The required education courses provide students with the theoretical knowledge and practicum-based experiences crucial to understanding the challenges of secondary mathematics education. Students completing this major are prepared to become leaders in the field of mathematics education, either as scholars or educators.

Majors are eligible to apply for admission to the Bowdoin Teacher Scholars teacher certification program. Completing the major requirements in a timely fashion requires advanced planning, so students are strongly encouraged to meet with faculty from both the mathematics and education departments early in their college careers.

## Interdisciplinary Majors

## Requirements

1. Eleven courses from the Departments of Mathematics and Education, all passed with a grade of C- or better. At most two of the courses in mathematics can be transfer credits from other institutions. Transfer credits are not accepted for the courses in education.
2. Mathematics 1800, 2000, and 2020.
3. At least one mathematics course in modeling: 1808 \{formerly 2108\} (same as Biology 1174), 2109, 2208, or 2209 .
4. At least one mathematics course in algebra and analysis: Mathematics 2301, 2303, 2502, 2602, 2603, or 2702.
5. At least one mathematics course in geometry: Mathematics 2404 or 3404.
6. At least one course in statistics: Mathematics 1200, 1300, or 2606. This statistics requirement may alternately be met with a score of 4 or 5 on the AP Statistics exam, Economics 2557, or Psychology 2520, provided that the student also completes Mathematics 2206.
7. Education 1101, 2203, 3301, and 3302. Students must take Education 3301 and 3302 concurrently during the fall semester of their junior or senior year.

# Latin American Studies 

Gustavo Faverón Patriau, Program Director
Jean M. Harrison, Program Coordinator
Fellow: Jennifer Baca

Contributing Faculty: Greg Beckett, Margaret Boyle†, Nadia V. Celis**, Elena M. Cueto Asín, Gustavo Faverón Patriau, Marcos Lopez, Stephen J. Meardon, Krista E. Van Vleet $\dagger$, Hanétha Vété-Congolo, Susan E. Wegner, Allen Wells, Eugenia Wheelwright, Nathaniel T. Wheelwright, Carolyn Wolfenzon, Enrique Yepes

The Latin American Studies Program explores the history, aesthetic production, and contemporary relationships of the diverse cultural groups of Mexico, the Caribbean, Central and South America, and Latinas and Latinos in the United States. Its multidisciplinary approach is designed to integrate the scholarly methods and perspectives of several disciplines in order to foster increased understanding of Latin America's social differences and economic realities, cultural diversity, transnational connections, historical trajectories, and range of popular culture and artistic and literary expression. Competence in a language spoken in the region other than English (such as Spanish, French, or Portuguese) is required, and it is strongly recommended that students participate in an off-campus study program in Latin America.

## Requirements for the Major in Latin American Studies

The major consists of nine courses, including:

1. One course, offering a survey of cultural production (literature, art, music, mass media, etc.) in Latin America, conducted in one of the languages spoken in the region other than English. Students may choose:
a. Latin American Studies 2407, Francophone Cultures (same as Africana Studies 2407 and French 2407); or
b. Latin American Studies 2409, Introduction to Hispanic Studies: Poetry and Theater (same as Spanish 2409); or
c. Latin American Studies 2410, Introduction to Hispanic Studies: Essay and Narrative (same as Spanish 2410); or
d. a comparable course from off-campus study that surveys Latin American cultural production in Spanish, French, or Portuguese.
2. A survey course in Latin American history covering several countries and periods in the region. Students may choose: Latin American Studies 2401, Colonial Latin America (same as History 2401); Latin American Studies 2402, Modern Latin America (same as History 2402); or Latin American Studies 2403, Latin American Revolutions (same as History 2403).
3. An intermediate course (numbered 2500-2799) in the social sciences (anthropology, economics, government, psychology, or sociology) that focuses on Latin America or Latinos in the United States. (Note: Students may also need to take prerequisite courses in the crosslisting department.)

## Latin American Studies

4. A concentration of four additional courses centered on a particular theme (e.g., identity and inequality) and/or geographic region (e.g., the Andes, Caribbean), selected by each major in consultation with a faculty advisor in the Latin American Studies Program. The courses for the concentration should be at the intermediate level (numbered 2000-2969) or advanced level (numbered 3000-3999).
5. An elective course in Latin American studies, outside the student's concentration.
6. An advanced course (numbered 3000-3999) or Advanced Independent Study in Latin American studies during the senior year.

A maximum of three courses from off-campus study programs may count toward the major with the approval of the director of Latin American studies. Courses that will count toward the major must be taken for regular letter grades (not Credit/D/Fail), and students must earn grades of C - or better in these courses.

## Requirements for the Minor in Latin American Studies

The minor consists of at least one Spanish course at Bowdoin beyond Spanish 2204 (or another appropriate language); Latin American Studies 2402, Modern Latin America (same as History 2402); 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 director of Latin American studies of a written prospectus of the project. A maximum of two courses from off-campus study programs may count toward the minor with the approval of the director of Latin American studies. Courses that will count toward the minor must be taken for regular letter grades (not Credit/D/Fail), and students must earn grades of C- or better in these courses.

## Program Honors

Students contemplating honors candidacy must have established records of A and B grades in program course offerings and must present clearly articulated proposals for scholarly research. Students must prepare and defend an honors thesis before a program faculty committee.

# Mathematics 

Adam B. Levy, Department Chair
Suzanne M. Theberge, Senior Department Coordinator

Professors: William Barkert, Adam B. Levy, Jennifer Taback, Mary Lou Zeeman<br>Associate Professor: Thomas Pietraho<br>Assistant Professors: Christopher Chong, John O’Brient, Amanda Redlich, Manuel Reyes Lecturers: Eric Gaze, Michael King<br>Visiting Faculty: Charles E. Cunningham, Mario Micheli

## Requirements for the Major in Mathematics

A major consists of at least nine courses numbered 1800 or higher, including Mathematics 2000 and 2020 (or their equivalents), and an advanced course (numbered 3000-3969). Students who have already mastered the material in Mathematics 2000 and 2020 may substitute a more advanced course after receiving approval from the department chair. Each of the nine courses required for the major must be graded with regular letter grades and passed with a grade of C- or better. At most two of these nine courses can be transfer credits from other institutions.

A student must submit a planned program of courses to the department when he or she declares a major. That program should include both theoretical and applied mathematics courses, and it may be changed later with the approval of the departmental advisor.

The requirement of an advanced course (numbered 3000-3969) is meant to ensure that all majors have sufficient experience in at least one specific area of mathematics. Those areas are algebra (Mathematics 2000, 2502, 2602, 2702, 3602, 3702); analysis (Mathematics 2303, 2603, and 3603); modeling and dynamics (Mathematics 2208, 3108, and 3208); optimization and numerical methods (Mathematics 2109, 2209, 3109, and 3209); probability and statistics (Mathematics 2206, 2606, and 3606); and geometry (Mathematics 2404, and 3404).
In exceptional circumstances, a student may substitute a quantitative course from another department for one of the eight mathematics courses required for the major, but such a substitution must be approved in advance by the department. Without specific departmental approval, no course that counts toward another department's major or minor may be counted toward a mathematics major or minor.

Majors who have demonstrated that they are capable of intensive advanced work are encouraged to undertake independent study projects. With the prior approval of the department, such a project counts toward the major requirement and may lead to graduation with honors in mathematics.

## Requirements for the Minor in Mathematics

A minor in mathematics consists of a minimum of five courses numbered 1800 or higher. Each of the five courses required for the minor must be graded with regular letter grades and passed with a grade of C- or better. At most one of these five courses can be a transfer credit from another institution.

## Mathematics

## Interdisciplinary Majors

The department participates in three interdisciplinary joint majors: computer science and mathematics, mathematics and economics, and mathematics and education. See pages 76-80.

## Recommended Courses

Listed below are some of the courses recommended to students with the indicated interests.
For secondary school teaching:
Computer Science 1101; Mathematics 1808 \{formerly 2108\} (same as Biology 1174), 2000, 2020, 2109, 2208, 2303, 2404, 2502, 2602, 2603, 2606, 2702.

For graduate study:
Mathematics 2000, 2020, 2303, 2501, 2602, 2603, 2702, and at least two advanced courses (numbered 3000-3999).

For engineering and applied mathematics:
Mathematics 1808 \{formerly 2108\} (same as Biology 1174), 2000, 1808 \{formerly 2108\} (same as Biology 1174), 2206, 2208, 2209, 2303, 2501, 2601, 2606, 3108, 3109, 3208, and 3209.

For mathematical economics and econometrics:
Mathematics 2000, 2109, 2206, 2209, 2603, 2606, 3108, 3109, 3208, 3209, 3606, and Economics 3516.

For statistics:
Mathematics 2000, 2206, 2208, 2209, 2603, 2606, 3606.
For computer science:
Computer Science 2200, 2210; Mathematics 2000, 2020, 2109, 2206, 2209, 2601, 2602, 2606, 3209 , and 3404.

For operations research and management science:
Mathematics 2000, 2020, 2109, 2206, 2601, 2606, 3109, 3606, and Economics 3516.

## Music

Vineet Shende, Department Chair<br>Linda Marquis, Senior Department Coordinator<br>Professors: Robert K. Greenlee, Mary Hunter<br>Associate Professor: Vineet Shende<br>Assistant Professor: Tracy McMullen<br>Senior Lecturer: Frank Mauceri<br>Lecturers: Anthony F. Antolini, Jeffrey Christmas, Eric LaPerna, Amos Libby, John Morneau, Christopher Watkinson, Michael Wingfield<br>Artist in Residence: George Lopez

## Requirements for the Major in Music

The music major consists of twelve credits that include courses from three areas: social and historical context ( $\mathrm{x} 1 \mathrm{xx}-\mathrm{x} 3 \mathrm{xx}$ ), theory and composition ( $\mathrm{x} 4 \mathrm{xx}-\mathrm{x} 5 \mathrm{xx}$ ), and performance ( $\mathrm{x} 6 \mathrm{xx}-\mathrm{x} 8 \mathrm{xx}$ ). Majors can choose either to pursue a broader curriculum with some balance among these areas or to concentrate in one of them, as indicated in the specific courses listed below. All majors are also required in their final semester to take an independent study that includes a seminar component. Honors work normally adds one extra course credit, and its second semester counts as the senior independent study. Only one academic course in which the grade of CR (Credit) is received may count toward the major.

The process for declaring the major is as follows: (1) the student consults with a member of the music faculty as early in the individual's college career as possible; (2) before declaring a major, the student proposes to the faculty member a list of courses that fulfill the major according to the guidelines below; (3) upon departmental approval of the list, the major declaration is signed by the department chair. Subsequent alterations to this list of courses are possible only in consultation with the chair of the department or another member of the music faculty.

## Sequence of Courses for the Music Major

## General

Theory and Composition: Music 1401, and at least two electives in this area.
Social and Historical Context: Music 1101 or 2101, and at least two electives in this area.
Performance: Two consecutive semesters in a single ensemble (from Music 2700s), and two consecutive semesters in Individual Performance Studies (Music 2800s).

Capstone, any area: Music 4040.
In addition: three electives in any area, with the exception of 2700 s and 2800 s.
At least four elective courses must be at the 2000 level or above, and at least one at the 3000 level.

Music

## Music in Social and Historical Context

Theory and Composition: Music 1051 or 1401, and at least one elective in this area.
Social and Historical Context: Music 1101, 2101, one course from 3100-3399, and four electives in this area, of which three must be at the 2000 level or above. On department approval, two of these may be in a related field outside the department.

Performance: Two consecutive semesters in each of two different ensembles (Music 2700s); or two consecutive semesters of ensembles, and two consecutive semesters in Individual Performance Studies (Music 2800s).

Capstone, Social and Historical Context: Music 4040.

## Theory and Composition

Theory and Composition: Music 1401, or 2403, 2501; also four more courses, one each from the following pairs: Music 1451 or 2551, 2401 or 2602, 3401 or 3403,3501 or 3551.

Social and Historical Context: Music 1101 or 2101, and any course in this area at the 2000 level or above.

Performance: Two consecutive semesters of ensembles (from Music 2700s), and two consecutive semesters in Individual Performance Studies (Music 2800s).

Capstone, Theory and Composition: Music 4040.

## Performance

Theory and Composition: Music 1401, 2401, or 2403.
Social and Historical Context: Music 1101 or 2101, and a course relevant to student's area of performance.

Performance: 2601 or 2603, 2602, one consecutive year in two different ensembles (from Music 2700s), one consecutive year in Individual Performance Studies (Music 2800s and 3805).

Capstone, Performance: Music 4040.

## Requirements for the Minor in Music

The minor in music consists of six credits (five academic courses and two consecutive semesters of lessons for credit or two consecutive semesters of participation for credit in a single ensemble). The five academic courses include 1401 and any four others including at least two at the intermediate ( 2 xxx ) level or higher. Only one academic course for which the grade of CR (Credit) is earned may count toward the minor.

## Performance Studies

Up to six credits of individual performance and ensemble courses together may be taken for graduation credit. Music courses numbered 3805-3807 count for academic credit and are thus not included in this limitation. Students may participate on a non-credit basis in lessons, some large ensembles, chamber ensembles, and jazz ensembles upon instructor or departmental approval only. Please see the Course Guide or Polaris for additional provisions and information on individual performance and ensemble courses.

Instructors for 2015-2016 include: Christina Astrachan (voice), Naydene Bowder (piano and harpsichord), Christina Chute (cello), Ray Cornils (organ), Duane Edwards (jazz bass), Matt Fogg (jazz piano), Steve Grover (percussion), Anita Jerosch (low brass), John Johnstone (classical guitar), David Joseph (bassoon), George Lopez (piano), Kathleen McNerney (oboe),

Kirsten Monke (viola), Joyce Moulton (piano), Tim O’Dell (sax), Taylor O’Donnell (pop/jazz voice), Dean Stein (violin), Mark Tipton (trumpet), Krysia Tripp (flute), Scott Vaillancourt (tuba), Yasmin Vitalius (violin), and Gary Wittner (jazz guitar).

Music Ensembles: Every semester
The following provisions govern ensemble:

1. Most ensembles are auditioned. (No auditions required for Music 2769, 2775, and 2781.) May be repeated for credit; returning students need not normally re-audition.
2. One-half credit may be granted for each semester of study. To receive credit, the student must register for the course in Polaris at the beginning of each semester.
3. Grading is Credit/D/Fail. Members of ensembles must attend rehearsals regularly and participate in all dress rehearsals and performances, or they receive a grade of D or F for the course.
4. Ensembles meet regularly for a minimum of three hours weekly, inclusive of time without the ensemble director; ensemble directors establish appropriate attendance policies.

## Neurosaienge

Hadley Wilson Horch, Program Director
Julie J. Santorella, Program Coordinator

Professors: Patsy S. Dickinson (Biology), Richmond R. Thompson $\dagger$ (Psychology)
Associate Professor: Hadley Wilson Horch (Biology)
Assistant Professor: Erika M. Nyhus (Psychology)
Contributing Faculty: Amy S. Johnson, Mary Lou Zeeman
Laboratory Instructor: Nancy J. Curtis

## Requirements for the Major in Neuroscience

The major consists of thirteen courses, including ten core courses and three electives from the lists to follow. Advanced placement credits may not be used to fulfill any of the course requirements for the major except Introductory Chemistry. Independent study in neuroscience may be used to fulfill one of the three elective credits. If students place out of Psychology 1101 or Biology 1109, thirteen courses related to neuroscience must still be completed.

Note: The information provided below is a listing of required and elective courses for the major in neuroscience. These courses are offered by other departments and programs within the College. Please refer to bowdoin.edu/classfinder and the Departments of Biology, Chemistry, Computer Science, Mathematics, Physics, and Psychology for further information, including course descriptions, instructors, and semesters when these courses will next be offered.

## I. Core Gourses

## Introductory Level and General Courses:

Biology 1109 a - MCSR, INS. Scientific Reasoning in Biology or
Biology 1102 a - MCSR, INS. Biological Principles II
Chemistry 1102 a - MCSR, INS. Introductory Chemistry II or

## Neurosaience

Chemistry 1109 a - MCSR, INS. General Chemistry
Chemistry 2250 a. Organic Chemistry I
Psychology 1101 b. Introduction to Psychology
Psychology 2520 a - MCSR. Data Analysis or Mathematics 1300 a - MCSR. Biostatistics

## Introductory Neuroscience Course:

Biology 2135 a - MCSR, INS. Neurobiology or Psychology 2050 a. Physiological Psychology

## Mid-level Neuroscience Courses:

Three of the following:
Biology 2553 a - INS. Neurophysiology
Biology 2566 a - INS. Molecular Neurobiology
Psychology 2750 a - INS. Laboratory in Behavioral Neuroscience: Social Behavior
Psychology 2775 a - MCSR, INS. Laboratory in Cognitive Neuroscience

## Advanced Neuroscience Course:

One of the following:
Biology 3325 a - INS. Topics in Neuroscience
Biology 3329 a - INS. Neuronal Regeneration
Psychology 3050 a. Hormones and Behavior
Psychology 3051 a. Comparative Neuroanatomy
Psychology 3055 a. Cognitive Neuroscience of Memory

## II. Electives

Three electives may be chosen from the courses listed above (but not already taken) or below:
Biology 1101 a - MCSR, INS. Biological Principles I
Biology 2112 a - MCSR, INS. Genetics and Molecular Biology
Biology 2124 a - MCSR, INS. Biochemistry and Cell Biology
Biology 2175 a - MCSR, INS. Developmental Biology
Biology 2214 a - MCSR, INS. Comparative Physiology
Biology 2423 a - INS. Biochemistry of Cellular Processes
Biology 3333 a - INS. Advanced Cell and Molecular Biology
Chemistry 2310 a - Fundamentals of Biochemistry
Chemistry 2320 a - MCSR. Biochemistry
Computer Science 1101 a. Introduction to Computer Science
Computer Science 3400 a. Cognitive Architecture
Mathematics 2108 a - MCSR. Biomathematics (same as Biology 1174)
Physics 1140 a - MCSR, INS. Introductory Physics II
Psychology 2010 b. Infant and Child Development
Psychology 2040 b. Cognitive Psychology
Psychology 2060 b. Cognitive Neuroscience
Psychology 2510 b. Research Design in Psychology
Psychology 2725 b. Laboratory in Clinical Psychology
Psychology 2740 b. Laboratory in Cognition
Neuroscience 2970-2973 a. Intermediate Independent Study in Neuroscience.
Neuroscience 2999 a. Intermediate Collaborative Study in Neuroscience.
Neuroscience 4000-4003 a. Advanced Independent Study in Neuroscience.
Neuroscience 4029 a. Advanced Collaborative Study in Neuroscience.
Neuroscience 4050-4051 a. Honors Project in Neuroscience.

## Philosophy

Scott R. Sehon, Department Cbair
Jean M. Harrison, Department Coordinator

Professors: Scott R. Sehon, Matthew Stuart
Associate Professors: Sarah O’Brien Conly, Lawrence H. Simon (Environmental Studies)** Assistant Professor: Kristi Olson

## Requirements for the Major in Philosophy

The major consists of nine courses, which must include Philosophy 2111, 2112, and 2233. Of the remaining six courses, there must be at least one course with a primary focus on epistemology and metaphysics (Philosophy 1040-1049, 1400-1499, 2400-2499, 3400-3499); and there must be at least one course with a primary focus on value theory (Philosophy 1030-1039, 1300-1399, 2300-2399, 3300-3399). At least two classes must be from the advanced group (numbered 3000-3999). Students must earn grades of C- or better in courses to be counted toward the major.

## Requirements for the Minor in Philosophy

The minor consists of five courses, which must include Philosophy 2111 and 2112, one other course from the intermediate group (numbered 2000-2969), and one course from the advanced group (numbered 3000-3969). The fifth course may be from any level. Students must earn grades of C - or better in courses to be counted toward the minor.

## First-Year Seminars

Topics in first-year seminars change from time to time but are restricted in scope and make no pretense to being an introduction to the whole field of philosophy. They are topics in which contemporary debate is lively and as yet unsettled and to which contributions are often being made by more than one field of learning. For a full description of first-year seminars, go to bowdoin.edu/classfinder.

## Introductory Courses

Introductory courses are open to all students regardless of year and count toward the major. They do not presuppose any background in philosophy and are good first courses.

## Advanced Courses

Although courses numbered in the 3000s are advanced seminars primarily intended for majors in philosophy, adequately prepared students from other fields are also welcome. Besides stated prerequisites, at least one of the courses from the group numbered in the 2000s is a helpful preparation.

# Physics and Astronomy 

Dale A. Syphers, Department Chair<br>Emily C. Briley, Department Coordinator<br>Professors: Thomas Baumgarte, Madeleine E. Msall, Stephen G. Naculich $\dagger$, Dale A. Syphers Associate Professor: Mark O. Battle<br>Visiting Faculty: Juan R. Burciaga<br>Senior Lecturer: Karen Topp<br>Laboratory Instructors: Kenneth Dennison, Gary L. Miers

The major program depends to some extent on the student's goals, which should be discussed with the department. Those who intend to do graduate work in physics or an allied field should plan to do an honors project. For those considering a program in engineering, consult pages 37-38. A major with an interest in an interdisciplinary area such as geophysics, biophysics, or oceanography should 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. Courses that count toward the major or minor must be taken for regular letter grades (not Credit/D/Fail).

## Requirements for the Major in Physics

A student majoring in physics is expected to complete at least Mathematics 1600, 1700, Physics 1130, 1140, 2130, 2140, 2150, one advanced methods course (Physics 3000, 3010, or 3020), and two additional approved courses higher than 1140 (one of which may be Mathematics 1800 or higher, or Computer Science 1101). At least five physics courses must be taken at Bowdoin.

For honors work, a student is expected to complete Mathematics 1800, and Physics 1130, $1140,2130,2140,2150,3000,4050$, and four additional physics courses, three of which must be at the advanced level (numbered 3000-3999).

## Requirements for the Minor in Physics

The minor consists of at least four physics courses (completed at Bowdoin) numbered 1130 or higher, one of which must be Physics 1140.

## Interdisciplinary Majors

The department participates in an interdisciplinary program in chemical physics. See page 76.
The department does not participate in a formal interdisciplinary program with the Department of Earth and Oceanographic Science. However, the Departments of Physics and Earth and Oceanographic Science have identified major/minor pathways for students majoring in physics with an interest in earth and oceanographic science (physics major/earth and oceanographic science minor) and students majoring in earth and oceanographic science with an interest in physics (earth and oceanographic science major/physics minor).

Students pursuing the physics major/earth and oceanographic science minor with interests in the solid earth discipline would be best served by selecting Earth and Oceanographic Science 1105, 2005 (same as Environmental Studies 2221), and two of the following earth and oceanographic science courses: $2125,2145,2165,3115$.

Those with interests in the sufface earth discipline should select Earth and Oceanographic Science 1305 (same as Environmental Studies 1104), 2005 (same as Environmental Studies 2221), and two from 2315 (same as Environmental Studies 2277), 2325, 2345 (same as Environmental Studies 2270), and 2355.

Those with interests in the oceanography discipline should choose Earth and Oceanographic Science 1505, 2005 (same as Environmental Studies 2221), and two from 2525, 2530, 2540, 2585 (same as Environmental Studies 2282), 2635 (same as Environmental Studies 2267), and 3515.

Students planning to pursue one of the 3-2 engineering options and graduating with a physics degree must take Physics 1140, 2130, 2150, and Physics 3000 or Mathematics 2208; Chemistry 1102 or 1109; mathematics through 1800; and Computer Science 1101. Other courses are expected by the engineering institution and students should contact the advisor in the department.

## Prerequisites

Students must earn a grade of C- or above in any prerequisite physics course.

## Psyghology

Louisa M. Slowiaczek, Department Cbair<br>Donna M. Trout, Senior Department Coordinator

Professors: Samuel P. Putnam, Louisa M. Slowiaczek, Richmond R. Thompson $\dagger$ (Neuroscience) Associate Professor: Suzanne B. Lovett
Assistant Professors: Erika M. Nyhus (Neuroscience), Hannah E. Reese, Zachary K. Rothschild Visiting Faculty: Brian J. Piper (Neuroscience)

Students in the Department of Psychology may elect a major within the psychology program, or they may elect an interdisciplinary major in neuroscience, sponsored jointly by the Departments of Psychology and Biology (see Neuroscience, pages 87-88). The program in psychology examines contemporary perspectives on principles of human behavior in areas ranging from cognition, language, development, and behavioral neuroscience to interpersonal relations and psychopathology. Its approach emphasizes scientific methods of inquiry and analysis.

## Requirements for the Major in Psychology

The psychology major comprises ten courses. These are selected by students with their advisors and subject to departmental review. The major includes Psychology 1101, which is a prerequisite to further study in psychology, and Psychology 2510 and 2520. These three core courses should be completed before the junior year when feasible. The major also includes laboratory and advanced courses. Students have the option of taking either (a) two laboratory courses numbered 2700-2799 and two advanced courses numbered 3000-3999, or (b) three

## Psyghology

laboratory courses numbered 2700-2799 and one advanced course numbered 3000-3999. Note that Psychology 2750, or 2775, but not both, may count toward the two-course laboratory option. No more than one course from among Psychology 3010, 3011, and 3013 may count toward the two-advanced-course option. Similarly, no more than one course from among Psychology 3050, 3051, and 3055 may count toward the two-advanced-course option. Finally, the major includes three electives chosen from among all psychology courses. Students are encouraged to consider an independent study course on a library, laboratory, or field research project. Independent study courses at any level count as electives, but do not count toward the laboratory requirement or the advanced-course requirement.

Students who are considering a major in psychology are encouraged to enroll in Psychology 1101 during their first year at Bowdoin and to enroll in Psychology 2510 and 2520 during their second year. Students must take Psychology 2510 before 2520 and prior to any course numbered 2700 or above. Psychology 2520 must be taken concurrently with or prior to any laboratory course (numbered 2700-2799). Psychology 2520 must be taken prior to advanced courses 3000-3999. If possible, students should begin their laboratory work no later than the fall of their junior year. Those who plan to study away from campus for one or both semesters of their junior year should complete at least one laboratory course before leaving for their off-campus experience and plan their courses so that they can complete the major after returning to campus. Students should speak with the chair of the department regarding their off-campus study plans and transfer of credit toward the major. Laboratory or advanced courses taken elsewhere may be counted as electives but are not normally counted toward the laboratory or advanced course requirement.

## Requirements for the Minor in Psychology

The psychology minor comprises six courses, including Psychology 1101, 2510, and 2520, and one laboratory course.

## Grade Requirements

To fulfill a major (or minor) requirement in psychology, a course must be taken for a standard letter and a grade of C - or better must be earned. There is one exception: Psychology 1101 may be taken with the Credit/D/Fail grading option, and it will count toward the major (or minor) if a grade of CR (Credit) is earned for the course.

## AP/IB Policy

Students who receive an AP score of 4 or higher on the psychology exam are considered to have met the prerequisite for courses requiring Psychology 1101. Students who receive an IB score of 5 or higher on the (higher level) psychology exam are considered to have met the prerequisite for courses requiring Psychology 1101. If students place out of Psychology 1101, ten psychology courses must still be completed for the major, and six for the minor.

# Religion 

Robert G. Morrison, Department Cbair<br>Lynn A. Brettler, Department Coordinator<br>Professors: John C. Holt (Asian Studies), Robert G. Morrison<br>Associate Professor: Elizabeth A. Pritchard $\dagger$<br>Assistant Professor: Todd Berzon<br>Fellow: Larisa Reznik

The Department of Religion offers students opportunities to study the major religions of the world, East and West, ancient and modern, from a variety of academic viewpoints and without sectarian bias.

Each major is assigned a departmental advisor who assists the student in formulating a plan of study in religion and related courses in other departments. The advisor also provides counsel in career planning and graduate study.

Because there are rarely prerequisites for religion courses, there are three common entry points into the department:
A. First-year seminars: These introductory courses focus on the study of a specific aspect of religion and may draw on other fields of learning. These seminars include readings, discussions, presentations, and substantial writing assignments. Topics change from time to time and reflect emerging or debated issues in the study of religion. For a full description of first-year seminars, go to bowdoin.edu/classfinder.
B. 1000-level courses: For students desiring a broad overview of the academic study of religion, the department offers Religion 1101 (Introduction to the Study of Religion) both semesters. This course often uses case studies from different religions to illustrate thematic questions in the academic study of religion. Religion 1150, offered in the spring, uses the setting of the modern Middle East to introduce students to religions such as Christianity, Islam, and Judaism.
C. 2000-level courses: The bulk of the department's offerings are at this level. These courses have no prerequisites and are an appropriate first course for a student desiring a more focused examination of a religion, book(s), or theme.
D. Advanced ( 3000 -level) 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. Religion 3390 (Theories about Religion) is required for majors and minors and presupposes previous coursework in the department. Other advanced courses are open to any interested student.

## Requirements for the Major in Religion

The major consists of nine courses in religion, including two required courses-Religion 1101: Introduction to the Study of Religion and Religion 3390: Theories about Religion. For the seven remaining courses, four courses are to be taken at the intermediate level (numbered 2000-2999), one in each of the following four designated areas: (1) Asian Religions, (2) Bible and Comparative Studies, (3) Christianity and Gender, and (4) Islam and Post-Biblical Judaism. Majors must also complete an additional advanced course in religion (numbered 3000-3999) and two electives, one of which may be a first-year seminar (numbered 1000-1049).

## Religion

In order to enroll in Religion 3390, a major normally will be expected to have taken four of the nine required courses. This seminar is also open to qualified non-majors with permission of the instructor. In addition, candidates for honors complete a tenth course, advanced independent study, as part of their honors projects. (See below, Honors in Religion.) No more than one first-year seminar may be counted toward the major. No more than three courses taken at other colleges or universities count toward the major. Courses that will count toward the major or minor must be taken for regular letter grades (not Credit/D/Fail).

## 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. At the start of the fall semester of their senior year, honors candidates enroll in an advanced independent study with a faculty member who has agreed to supervise the project. If the proposal, due toward the end of the fall semester, is accepted, the student goes on to enroll in an advanced independent study for the spring semester in order to complete the project. Please see the Department of Religion website for more details.

## Requirements for the Minor in Religion

A minor consists of five courses-Religion 1101; three courses at the intermediate level (numbered 2000-2969), at least one of which shall be in Western religions and cultures, and one in Asian religions and cultures; and Religion 3390.

# Romange Languages and Literatures 

Enrique Yepes, Department Cbair<br>Kate Flaherty, Department Coordinator<br>Associate Professors: Elena Cueto Asín, Nadia V. Celis**, Charlotte Daniels, Katherine DaugeRoth, Gustavo Faverón Patriau, Arielle Saiber, Hanétha Vété-Congolo, Enrique Yepes<br>Assistant Professors: Meryem Belkaïd, Margaret Boyle $\dagger$, Allison Coopert, Carolyn Wolfenzon<br>Senior Lecturers: Davida Gavioli, Anna Rein, Eugenia Wheelwright<br>Visiting Faculty: Erin Curren, Janice Jaffe, Julia Venegas<br>Fellow: Matthew Goldmark<br>Teaching Fellows: Alix Desnain, Luisa Fernanda Morales, Soazig Thaëron, Maura Zerella

The Department of Romance Languages and Literatures offers courses in French, Italian, and Spanish language, literature, and culture. In addition to focusing on developing students' fluency in the languages, the department provides students with a broad understanding of the cultures and literatures of the French-speaking, Italian-speaking, and Spanish-speaking worlds through a curriculum designed to prepare students for teaching, international work, or graduate study. Native speakers are involved in most language courses. Unless otherwise indicated, all 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 excellent programs abroad, and interested students should seek the advice of a member of the department early in their sophomore year to select a program and to choose courses that complement the offerings at the College.

## Independent Study

This is an option primarily intended for students who are working on honors projects. It is also available to students who have taken advantage of the regular course offerings and wish to work more closely on a particular topic. Independent study is not an alternative to regular course work. An application should be made to a member of the department prior to the semester in which the project is to be undertaken and must involve a specific proposal in an area in which the student can already demonstrate knowledge.

## Honors in Romance Languages and Literatures

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 departmental honors must have an outstanding record in other courses in the department.

## Requirements for Majors in the Department of Romance Languages and Literatures

Students may declare a major in Francophone Studies or in Hispanic Studies or in Romance Languages and Literatures (with courses in two of the three languages: French, Italian, and Spanish). All majors are expected to achieve breadth in their knowledge of the French-, Italian-, and/or Spanish-speaking worlds by taking courses on the literatures and cultures of

## Romange Languages and Literatures

these areas from their origins to the present. Students should also take complementary courses in study-away programs or in other departments and programs such as art history, Latin American studies, history, English, and Africana studies. The major consists of nine courses more advanced than French 2204 or Spanish 2204*. Students must achieve a grade of C- or higher in all prerequisite courses.

All majors in Hispanic Studies, Francophone Studies, and Romance Languages and Literatures will complete at least three advanced courses (numbered 3000-3999). No more than two courses may be in independent study, and no fewer than five Bowdoin courses should be taken. Students who study abroad for one semester will receive a maximum of three credits toward the major. Those who study abroad for the academic year will receive a maximum of four credits toward the major.

## Francophone Studies Major Requirements

Nine courses higher than French 2204 ${ }^{1}$, including:

1. At least two of the following five courses: French 2407 (same as Africana Studies 2407 and Latin American Studies 2407) or 2408, or the equivalent in study abroad; and French 2409, 2410 , or 2411 , or the equivalent in study abroad.
2. Three courses at the 3000 level, including French 3299 (senior seminar), if offered. At least two advanced courses (numbered 3000-3999) must be taken at Bowdoin.
3. Students are strongly encouraged to include courses dealing with all periods and several Francophone contexts.

## Hispanic Studies Major Requirements

Nine courses higher than Spanish 2204 ${ }^{1}$ :

1. Spanish 2305 (same as Latin American Studies 2305), 2409 (same as Latin American Studies 2409), and 2410 (same as Latin American Studies 2410).
2. Three courses at the advanced level (numbered 3000-3999), at least two of which must be taken at Bowdoin.
3. Students are strongly encouraged to include courses dealing with all periods and several Spanish-speaking contexts.

## Romance Languages and Literatures Major Requirements

Nine courses higher than $2204^{1}$ in two languages, including the corresponding requirements below:

1. French 2407 (same as Africana Studies 2407 and Latin American Studies 2407) or 2408 and 2409,2410 , or 2411 , or the equivalent in study abroad.
2. Italian 2305 and 2408, or the equivalent in study abroad, if combining Spanish or French with Italian
3. Spanish 2409 (same as Latin American Studies 2409) and 2410 (same as Latin American Studies 2410), or the equivalent in study abroad.
4. Three courses at the advanced level (numbered 3000-3999), at least two of which must be taken at Bowdoin. These courses may be taken in either or both languages. If one of the languages is Italian, at least one advanced level course (numbered 3000-3999) must be in Italian.
${ }^{1}$ Or eight courses higher than 2204 for students beginning with 1101,1102 or 2203.

## Requirements for Minors in Romance Languages and Literatures

Students may declare a minor in Francophone Studies, Italian Studies, or Hispanic Studies. A minor in Francophone Studies or Hispanic Studies consists of at least four Bowdoin courses in one language numbered higher than 2204, including one advanced course (numbered 30003999). A minor in Italian Studies consists of at least three Bowdoin Italian courses numbered higher than 2204, including one advanced course (numbered 3000-3999). The Italian Studies minor may include one intermediate course (numbered 2000-2969 or equivalent) from abroad; the advanced course (numbered 3000-3999) must be taken at Bowdoin. Courses taken abroad do not count for the Francophone Studies or Hispanic Studies minor.

## Placement

Entering first-year and transfer students who plan to take French, Italian, or Spanish must take the appropriate placement test, administered online during the summer. Students with questions regarding placement should speak with a faculty member in the department.
*Note: Students graduating in the 2015-2016 academic year will retain their current major or minor in this department (for example French). Students graduating after May 2016 will have majors and minors with the new names of Francophone Studies, Hispanic Studies, Romance Languages and Literatures and Italian Studies beginning in 2016.

# Russian 

Laura Henry, Department Chair<br>Sandra Kauffman, Department Coordinator

Visiting Faculty: Lindsay Ceballos, Michael Klimov

## Requirements for the Major in Russian Language and Literature

The Russian major consists of ten courses (eleven for honors). These include Russian 1101, 1102, 2203, and 2204; four courses in Russian higher than Russian 2204; and two approved courses in either Russian literature in translation or Eurasian/East European culture, or approved related courses in government, history, or economics (e.g., History 2108, The History of Russia, 1825-1936).

## Interdisciplinary Major

The department participates in an interdisciplinary major in Eurasian and East European studies. See page 78-79.

## Study Abroad

Students are encouraged to spend at least one semester in Russia. There are several approved Russian-language programs in Moscow, St. Petersburg, Irkutsk, and other cities that are open to all students who have taken the equivalent of two or three years of Russian. Programs should be discussed with the Russian department. Students returning from study abroad will be expected to take two courses in the department unless exceptions are granted by the chair. Two of the four semester credits from a one-semester study abroad program may be counted toward both the Eurasian and East European major and the Russian major; four credits may be counted toward a Russian major from a year-long program. Students who wish to transfer credit from summer study abroad should gain approval of their plans in advance; refer to Transfer of Credit from Other Institutions, page 34.

## Advanced Independent Study

This is an option intended for students who wish to work on honors projects or who have taken advantage of all the available regular course offerings and wish to work more closely on a particular topic already studied. Independent study is not an alternative to regular course work. Application should be made to a member of the department prior to the semester in which the project is to be undertaken and must involve a specific proposal in an area in which the student can already demonstrate basic knowledge. Two semesters of advanced independent studies are required for honors in Russian. Petition for an honors project must be made in the spring of the junior year.

## Requirements for the Minor in Russian

The minor consists of seven courses (including the first two years of Russian).

## Courses Taught in English Translation

The department offers courses in English that focus on Russian history, literature, and culture. These may be taken by non-majors and include a series of 2000-level courses: Russian 2220-2251.

# Sogiology and Anthropology 

Scott MacEachern, Department Cbair<br>Lori A. Brackett, Department Coordinator<br>Professors: Sara A. Dickey, Susan A. Kaplan, Scott MacEachern, Nancy E. Riley<br>Associate Professor: Krista E. Van Vleet $\dagger$<br>Assistant Professors: Greg Beckett, Theodore C. Greene, Marcos F. Lopez, Ingrid A. Nelson<br>Visiting Faculty: Monica Brannon, H. Roy Partridge Jr., April Strickland, Emily Wanderer

## Requirements for the Major

In consultation with an advisor, each student plans a major program that will nurture an understanding of society and the human condition, demonstrate how social and cultural knowledge are 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 or anthropology and contributes to pre-professional programs such as law and medicine. It also provides background preparation for careers in urban planning, public policy, the civil service, social work, business or personnel administration, social research, law enforcement and criminal justice, the health professions, journalism, secondary school teaching, and development programs.
A student may choose either of two major programs or two minor programs:
The major in sociology consists of ten courses, including Sociology 1101, 2010, 2030, and 3010. One or two of the ten courses may be advanced courses from anthropology (or, if approved by the department chair, from related fields to meet the student's special interests) or off-campus study courses (with departmental approval). In all cases, at least seven of the courses counted toward the major must be Bowdoin sociology courses. Sociology 2010 should be taken in the sophomore year.

The major in anthropology consists of ten courses including five core courses (Anthropology $1101,1102,2010$ or $2020,2030,3010$ ) and five electives. One elective must be an advanced course (numbered 3000-3999) other than 3010, and one elective must focus on a geographical area. Only one elective below the intermediate level (numbered below 2000) will be counted toward the major. One or two of the ten courses may be taken from the advanced offerings in sociology and/or, with departmental approval, from off-campus study programs. In all cases, at least eight of the ten courses must come from offerings of Bowdoin College.

## Requirements for the Minor

The minor in sociology consists of five sociology courses, including Sociology 1101, and four other courses at or above the intermediate level (numbered 2000 or above). One of the elective courses may be from anthropology (at or above 2000) or from off-campus study.
The minor in anthropology consists of five anthropology courses, including Anthropology 1101 and 1102, and three intermediate or advanced courses (numbered 2000-2969 and $3000-3999$ ). One of the elective courses must be an area study course, and one of the courses may be from off-campus study.

## Sogiology and Anthropology

For the anthropology major or minor program, one semester of independent study may be counted. For the sociology major program, two semesters of independent study may be counted, while for the minor program one semester may be counted.

In order for a course to fulfill the major or minor requirements in sociology or anthropology, a grade of C - or above must be earned in that course. Courses that count toward the major or minor must be taken for regular letter grades (not Credit/D/Fail).

## Core Courses

The core courses in sociology $(1101,2010,2030$, and 3010$)$ and the core courses in anthropology (1101, 1102, 2010, 2030, and 3010) must be taken at Bowdoin.

## Off-Campus Study

Study away in a demanding academic program can contribute substantially to a major in sociology and anthropology. Students are advised to plan study away for their junior year. A student should complete either the Sociology 2010 or Anthropology 2010 research methods course, depending on their major, before studying away. Students must obtain provisional approval for their study away courses in writing by department faculty before they leave for study away, and then seek final approval upon their return to Bowdoin.

## Departmental Honors

Students distinguishing themselves in either major program may apply for departmental honors. Awarding of the degree with honors will ordinarily be based on grades attained in major courses and a written project (emanating from independent study), and will recognize the ability to work creatively and independently and to synthesize diverse theoretical, methodological, and substantive materials.

# Theater and Dange 

Paul Sarvis, Department Chair<br>Noma Petroff, Department Coordinator<br>Professors: Sarah Bay-Cheng, Davis R. Robinson<br>Assistant Professor: Abigail Killeen<br>Senior Lecturers: Gwyneth Jones, Paul Sarvis<br>Lecturer: Judy Gailen<br>Visiting Faculty: Diomedes Koufteros<br>Fellow: Christina Knight

Students may minor in dance or theater. Although no major is offered in the Department of Theater and Dance, students with special interest may, with faculty advice, self-design a major in conjunction with another academic discipline. More information on student-designed majors may be found on page 20.

## Interdisciplinary Major

The department participates in an interdisciplinary major in English and theater. See page 77.

## Dange

The dance curriculum provides a coherent course of study through classes in dance technique and repertory, choreography, and dance history, theory, and criticism. The department emphasizes dance's relation to the performing and fine arts and its fundamental connection to the broad liberal arts curriculum. The program's goal is dance literacy and the development of skills important to original work in all fields: keen perception, imaginative problem solving, discipline, and respect for craft.

The department offers technique and repertory classes in ballet and modern dance, the latter term designating a wide spectrum of styles that focus on an inventive, unrestricted approach to movement. Many of these are half-credit courses, offered only on a Credit/D/Fail basisand may be repeated up to four times for credit. Full credit is given to students enrolled in both a technique class and its corresponding repertory class. Attendance at all classes is required. See course descriptions at bowdoin.edu/classfinder for full details.

## Requirements for the Minor in Dance

The minor consists of five course credits as follows:

- One course in History or Theory (x5xx or Dance 1102)
- One course in Creative Process ( x 4 xx or Dance 1101)
- One combined Technique/Repertory course ( $\mathrm{x} 2 \times 1$ and $\times 2 \times 2$ )
- Two additional courses

Students must earn a grade of CR (Credit) or C- or better in order to have a course count toward the minor in dance, and may not count more than three full credits from courses graded Credit/D/Fail.

## Theater

The Theater Program at Bowdoin offers students the opportunity to examine the ways theater can provoke the imagination, tell stories, create community, and challenge assumptions. Courses are offered in performance, theory, history, design, and stagecraft. Emphasis is placed on theater's fundamental connection to the liberal arts curriculum, as well as theater literacy, performance skills, respect for language, and an understanding of social/historical influences on drama. The aim is to develop imaginative theater practitioners who collaboratively solve problems of form and content with a passionate desire to express the human condition on stage.

## Requirements for the Minor in Theater

The minor consists of five courses as follows:

- One course at the 1000 level
- Four additional courses, including at least two above the 1000 level, any one of which may be in dance.
- One 2000-level course taken abroad may count toward the minor.

Students must earn a grade of CR (Credit) or C- or better in order to have a course count toward the minor in theater, and may not count more than one full credit from courses graded Credit/D/Fail.

# Educational Resources and Fagilities 

## Bowdoin College Library

Bowdoin's library-the intellectual heart of the College-provides a gateway to the world of information and ideas, helps students succeed academically, and supports teaching and research. In addition to notable print and manuscript collections, historically recognized as among Bowdoin's hallmarks of excellence, the Library offers a wealth of electronic resources and offers instructional programs in their use.

The Library's website (library.bowdoin.edu) is the portal to the combined Colby, Bates, and Bowdoin library catalog (CBBcat), rich collections of electronic and print resources, and useful digital research and discovery tools. The Library's collections, developed over a period of 200 years, exceed one million volumes and include more than 50,000 print and electronic periodical and newspaper subscriptions, 390 online indexes and databases, as well as e-books, audiovisual items, maps, photographs, a growing repository of born-digital content, and over 5,600 linear feet of manuscripts and archival records.

Librarians and faculty partner to encourage the use of scholarly resources throughout the curriculum and to teach students to identify, select, and evaluate information for course work and independent scholarship. All students receive information literacy instruction in their firstyear seminars, and librarians provide personalized assistance in using library resources.

Interlibrary loan and document delivery services allow students and faculty to request materials not held at Bowdoin; most journal articles are delivered electronically, and books arrive daily from Colby and Bates colleges, other libraries in New England, and worldwide.

## Library Locations and Collections

The handsome Hawthorne-Longfellow Library, the main library building, houses humanities and social sciences materials, the George J. Mitchell Department of Special Collections \& Archives, and a depository of federal and Maine State documents. It features an array of popular student study spaces, ranging from quiet individual carrels to technologically equipped group learning spaces, as well as an electronic classroom for instruction, a student gallery, and meeting rooms for public events and student exhibits, presentations, and other activities. The Library's new Media Commons features teaching and screening spaces, a recording studio, and workstations to support media viewing, capture, and design.

The George J. Mitchell Department of Special Collections \& Archives includes rare books and manuscripts of unusual depth for a college library, plus images, recordings, and historical documents of the College, as well as the personal papers of notable alumni, including Senator George J. Mitchell (Class of 1954). These research materials afford an invaluable opportunity for undergraduates to experience conducting original research; using primary resources in Special Collections \& Archives is a distinguishing characteristic of a Bowdoin education.

The Government Documents Collection provides the Bowdoin community and the public access to print and digital government information reflecting over two centuries of federal and state history.

The Hatch Science Library offers research and instructional services and a variety of individual and group study facilities in support of its science-related print and digital resources.

The William Pierce Art Library and the Robert Beckwith Music Library, located adjacent to classrooms and offices for those departments, serve as centers for research and study. The Art Library offers a strong collection of art books and exhibition catalogs. The Music Library contains scores, sound recordings, videos, music books, and computer and listening stations.

## Bowdoin College Museum of Art

The Bowdoin College Museum of Art, the cornerstone of the arts and culture at Bowdoin, was recently renovated and expanded to better house and display its renowned collection. One of the earliest collegiate art collections in the nation, it came into being through the 1811 bequest of James Bowdoin III of seventy European paintings and a portfolio of 141 old master drawings. Over the years, the collection has been expanded through the generosity of the Bowdoin family, alumni, and friends, and now numbers more than 20,000 objects, including paintings, sculpture, works on paper, decorative arts, and artifacts from prehistory to the present from civilizations around the world.

The Museum's landmark Walker Art Building was commissioned for the College by Harriet and Sophia Walker in honor of their uncle, a Boston businessman who had supported the creation of the first art gallery at Bowdoin in the mid-nineteenth century. The Walker sisters, encyclopedic collectors and supporters of art education, stipulated that the building be used exclusively for art purposes. Designed by Charles Follen McKim, the building was completed in 1894 and is on the National Register of Historic Places. Its brick, limestone, and granite façade is based on Renaissance prototypes, with a loggia flanked by large lion sculptures upon which generations of Brunswick children have been photographed.

The antiquities collections contain over 1,800 Assyrian, Egyptian, Greek, Roman, and Byzantine objects and constitute one of the most comprehensive compilations of ancient art in any college museum. European art includes paintings, illustrated manuscripts, sculptures, and decorative arts. Among twelve European Renaissance and Baroque paintings given in 1961 by the Kress Foundation is a panel depicting nymphs pursued by a youth that recently has been attributed to the young Fra Angelico. The collection of prints, drawings, and photographs is large and varied, numbering more than 8,000 works and representing artists from Rembrandt and Rubens through Callot, Goya, and Manet to Picasso and Warhol.
The Museum's American collection includes an important grouping of colonial and Federal portraits, with, for example, seven major paintings by Gilbert Stuart, including the famous presidential portraits of Thomas Jefferson and James Madison, together with other works by Robert Feke, John Copley, Thomas Sully, and Joseph Blackburn. Among other notable works are the murals commissioned by McKim to decorate the Museum's rotunda by the four leading painters of the American Renaissance: Elihu Vedder, Kenyon Cox, Abbott Thayer, and John LaFarge. The collection also includes works by significant nineteenth- and twentiethcentury artists such as Mary Cassatt, Thomas Eakins, John Sloan, Rockwell Kent, Marsden Hartley, and Andrew Wyeth, and an archive of memorabilia from Winslow Homer's Maine studio.

Non-western materials range from Japanese, Chinese, Korean, and Southeast Asian prints, ink paintings, sculpture, and decorative arts to modest but distinguished holdings of African, Pacific, Pre-Columbian, and Native American artifacts.

The recent renovation expanded galleries, added a seminar room, and improved art storage facilities. The restored Museum retains the building's iconic architectural features and provides
state-of-the-art climate control and mechanical systems. A new, dramatic glass and bronze entry pavilion designed by Machado and Silvetti Associates and completed in 2007, houses a glass elevator and "floating" steel staircase, while a rear addition to the building features an expansive glass curtain wall behind which the Museum has installed its five celebrated ancient Assyrian relief sculptures.

The Museum, open to the public at no charge, is a teaching facility, with the core of its mission to keep its rich collections within immediate reach of Bowdoin students, faculty, scholars, and visitors from near and far. Its active emphasis on the study of original objects as an integral part of the Bowdoin curriculum makes the Museum the ultimate cross-disciplinary and multicultural enterprise. Although online resources are no substitute for an actual visit, the collections can be searched and information on Museum programs and publications found on the website at bowdoin.edu/art-museum.

## Peary-MagMillan Arctic Museum and Arctic Studies Center

The Peary-MacMillan Arctic Museum was founded in honor of two famous Arctic explorers and Bowdoin alumni, Admirals Robert E. Peary (Class of 1877) and Donald B. MacMillan (Class of 1898). On April 6, 1909, after a lifetime of Arctic exploration, Peary became the first person to reach the North Pole. MacMillan was a crew member on that North Pole expedition. Between 1908 and 1954, MacMillan explored Labrador, Baffin Island, Ellesmere Island, and Greenland. Most of his expeditions were made on board the Bowdoin, a schooner he designed for work in ice-laden northern waters. MacMillan took college students on the expeditions and introduced them to the natural history and anthropology of the North. He was not the first to involve Bowdoin students in Arctic exploration, however. In 1860, Paul A. Chadbourne, a professor of chemistry and natural history, had sailed along the Labrador and West Greenland coasts with students from Williams and Bowdoin.

The Museum's collections include equipment, paintings, and photographs relating to the history of Arctic exploration; natural history specimens; artifacts and drawings made by indigenous people of Arctic North America; contemporary Canadian Inuit sculptures and prints; and Alaskan Inupiat sculptures, masks, and baleen baskets. The museum has large collections of ethnographic photographs and films recording past lifeways of Native Americans taken on the expeditions of MacMillan and Robert Bartlett, an explorer and captain who sailed northern waters for nearly fifty years. Diaries, logs, and correspondence relating to the museum's collections are housed in the Special Collections section of the Hawthorne-Longfellow Library.

The Museum, established in 1967, is located on the first floor of Hubbard Hall. The building was named for General Thomas Hubbard of the Class of 1857, a generous benefactor of the College and financial supporter of Peary's Arctic ventures. The museum's original galleries 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 Foundation, Inc., and federal and state grants have allowed the Museum to continue to grow.

The Arctic Studies Center was established in 1985 as a result of a generous matching grant from the Russell and Janet Doubleday Foundation to endow the directorship of the center, in recognition of the Doubledays' close relationship to MacMillan. The center links the
resources of the Museum and Library with teaching and research efforts, and hosts 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.

## Arts Fagilities

Bowdoin has a deep and historic commitment to the role of the arts in a liberal education which is supported by state-of-the-art facilities and numerous opportunities for participation in the vibrant student performance and art exhibition scene on campus. For students wishing to specialize in an artistic field, Bowdoin's programs offer exceptional flexibility and the opportunity for in-depth study with recognized faculty. Bowdoin also hosts an exciting array of performances and exhibitions, bringing renowned artists and scholars to campus from all parts of the world.

## Robert H. and Blythe Bickel Edwards Center for Art and Dance

The Robert H. and Blythe Bickel Edwards Center for Art and Dance, an ambitious renovation of a former landmark elementary school, offers a dynamic and communal center for the full range of activities in the visual arts and dance on campus, with modern studios, classrooms, spaces for student critiques and exhibitions, and a state-of-the-art digital media lab. This new addition to the campus replaces a number of disparate arts spaces. The Edwards Center for Art and Dance enables faculty and students engaged in dance, painting, drawing, photography, sculpture, architecture, printmaking, woodworking, and digital media and design to work together under a single roof, creating a cohesive arts community and numerous new opportunities for artistic synergy.

The Visual Arts Center houses the faculty in Art History, the Pierce Art Library, Beam Classroom, and Kresge Auditorium. (See also Museums, pages 104-105.)

## Pickard and Wish Theaters

Memorial Hall includes performance, rehearsal, set, and instructional facilities. The centerpiece is Pickard Theater, a 600 -seat theater with proscenium stage equipped with a full fly system and computer lighting. The 150 -seat Wish Theater addresses the needs of experimental, educational theater with a very flexible, relatively small space with high-tech lighting and sound. Memorial Hall also features a fully equipped design classroom, seminar rooms, and a dance studio.

## Gibson Hall

Gibson Hall houses the Department of Music and offers classrooms, rehearsal and practice rooms, teaching studios, the Beckwith Music Library, electronic music labs, faculty offices, a 68 -seat classroom/recital hall, and a more intimate seminar room. It is located on the main quadrangle between the Walker Art Building and the Hawthorne-Longfellow Library.

## Studzinski Recital Hall

The world-class Studzinski Recital Hall is a transformation of the Curtis Pool building into a 280 -seat, state-of-the-art facility for small- and medium-sized musical performances. The hall includes a rehearsal room, nine practice rooms, and a number of Steinway pianos. Kanbar Auditorium features raked seating, exceptional acoustics, advanced technical capabilities, and a stage designed to accommodate different performance configurations and types of musical programs, including classical, jazz, electronic, and world music.

## Genter for Learning and Teaching

Bowdoin College's Center for Learning and Teaching (CLT) houses a group of programs designed to support learning and teaching throughout the curriculum. The programs offer writing assistance, peer tutoring, academic mentoring, and study groups. The three programs and the English for Multilingual Students consultant are housed in Kanbar Hall, Room 102, and work cooperatively to enhance Bowdoin's curricular resources and to strengthen students' academic experience. The programs are described below.

## The Baldwin Program for Academic Development

The Baldwin Program for Academic Development opened in 1999-2000 with the mission of creating a space in which students, faculty, and staff members can address issues related to learning at Bowdoin College. Established through a gift to the College by Linda G. Baldwin '73, the program offers resources to help students attain their academic goals and faculty to enhance student learning.
Based on an individualized and holistic approach to learning, the program offers activities and services such as study skills workshops and individual consultation with peer academic mentors. Mentors help fellow students assess their academic strengths and weaknesses and develop individually tailored time management, organizational, and study strategies. Mentors may be particularly useful to students encountering difficulty balancing the academic and social demands of college life; struggling to find more effective approaches to understanding, learning, and remembering new material; experiencing problems with procrastination; or simply achieving the self-structuring demanded by an independent course or honors project.

## Quantitative Reasoning Program

The Quantitative Reasoning (QR) Program was established in 1996 to assist with the integration of quantitative reasoning throughout the curriculum and to encourage students to develop competence and confidence in using quantitative information. The program was established in recognition of the increasing demand to understand and use quantitative information in college-level work, in employment situations, and for effective citizenship.

The QR Program assists students in a variety of ways. Entering students are tested to assess their proficiency with quantitative material. Utilizing the test results and other indicators, the director of Quantitative Reasoning and faculty advisors counsel students regarding appropriate courses to fulfill their Mathematical, Computational, or Statistical Reasoning (MCSR) distribution requirement, including placement in the Mathematics 1050: Quantitative Reasoning course. In addition, students are encouraged to take courses across the curriculum that enhance their quantitative skills. The QR Program supplements many of the quantitative courses by providing small study groups led by trained peer tutors, as well as drop-in tutoring. Upon the request of instructors, workshops on special topics are also provided by the QR Program. One-on-one tutoring is available on a limited basis.

## The Writing Project

The Writing Project is based on the premise that students are uniquely qualified to serve as intelligent, empathetic, and helpful readers of one another's writing. As collaborators rather than authorities, peer writing assistants facilitate the writing process for fellow students by providing helpful feedback while encouraging writers to retain an active and authoritative role in writing and revising their work. Each semester, the Writing Project assigns specially selected and trained writing assistants to a variety of courses by request of the instructor.

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The assistants read and comment on early drafts of papers and meet with the writers individually to help them expand and refine their ideas, clarify connections, and improve sentence structure. After revisions have been completed, each student submits a final paper to the instructor along with the draft and the assistant's comments. Students in any course on campus may also reserve conferences with a writing assistant in the Writing Workshop open each week from Sunday through Thursday.

Students interested in becoming writing assistants apply before spring break. Those accepted enroll in a fall semester course on the theory and practice of teaching writing, offered through the Department of Education. Successful completion of the course qualifies students to serve as tutors in later semesters, when they receive a stipend for their work. A list of courses participating in the Project will be available during the first week of each semester. For further information, contact Kathleen O'Connor, director of the Writing Project, or visit the Writing Project website, bowdoin.edu/writing-project/.

## English for Multilingual Students

Students who are multilingual or who have non-native English speaking parents may work individually with the English for Multilingual Students consultant. Students may seek help with understanding assignments and readings and attend to grammar, outlining, revising, and scholarly writing conventions. Specific attention to pronunciation and oral presentation skills is also offered. Any student wishing to make an appointment with the English for Multilingual Students consultant is welcome.

## Field Stations

## The Bowdoin Pines

Adjacent to the campus on either side of the Bath Road is a 33-acre site known as the Bowdoin Pines. Cathedral white pines, some of them 135 years old, tower over the site, which is a rare example of one of Maine's few remaining old-growth forests. For biology students, the Pines provides an easily accessible outdoor laboratory. For other students, the site offers a place for a walk between classes, an inspirational setting for creating art, or simply a bit of solitude. A system of trails within the Pines makes the site accessible to students and community members.

## Bowdoin Scientific Station

The College maintains an island-based scientific field station in the Bay of Fundy, New Brunswick, Canada, where qualified students can conduct research in ecology, animal behavior, marine biology, botany, geology, and meteorology. The Bowdoin Scientific Station (BSS) is located on a cluster of islands in the Grand Manan Archipelago known as Three Islands. Three Islands consists of Kent, Sheep, and Hay Islands, which are owned entirely by the College. Kent Island, the largest of the Three Islands (250 acres), was presented to the College in 1936 by J. Sterling Rockefeller. In 2003, the College acquired neighboring Hay and Sheep Islands to help preserve the unique environment offered by Three Islands. The Bowdoin Scientific Station has an international reputation, with more than 205 peer-reviewed publications based on research at Three Islands, approximately 35 percent of which were co-authored by students.

Three Islands is a major seabird breeding ground. 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. Three Islands also features a variety of terrestrial habitats.

Although formal courses are not offered at BSS, students from Bowdoin and other institutions select problems for investigation at Three Islands during the summer and conduct independent field work with the advice and assistance of a faculty director. Students have the opportunity to collaborate with faculty members and graduate students from numerous universities and colleges. Three-day field trips to BSS are a feature of Bowdoin's courses in ecology and ornithology.

## Coastal Studies Center

The Coastal Studies Center occupies a 118-acre coastal site that is twelve miles from the campus on Orr's Island and known as Thalheimer Farm. The Center offers the Bowdoin Marine Science Semester each fall, and interdisciplinary teaching and research throughout the College.

The Center's facilities include the Marine Laboratory renovated in 2014, allowing researchers to study a diversity of benthic and pelagic marine organisms. The Marine Laboratory includes a new dry-laboratory classroom that features light microscopy and molecular biology. The site has 2.5 miles of coastline, a dock and pier facility, and a buoy facility that provides continuous monitoring of Harpswell Sound. The Center maintains a small boat fleet including the new twenty-eight-foot research vessel, the R/V A.O.K, the twenty-three-foot $\mathrm{R} / V$ Laine, and a maritime skiff. Other facilities include the Bowdoin sailing team's Leighton Sailing Center, and additional floats for sailing team boats. A centrally located farmhouse serves as a meeting space with a forty-five person capacity and a lab for computationally demanding science laboratories. Classes, students, and faculty from all disciplines use the Center for field work, research, lab work, meetings, and recreation.

The Coastal Studies Center site is surrounded on three sides by the ocean and encompasses open fields, orchards, and old-growth spruce-fir forest. A 4.5-mile interpretive trail runs through the site, offering students and the local community a glimpse into the cultural and natural history of the property and surrounding coastal waters.

## Student Fellowships and Researgh

The Office of Student Fellowships and Research was launched in Fall 2007 with the aim of connecting Bowdoin students to merit-based academic experiences. Often, the application forms for these merit-based scholarships and fellowships require applicants to concisely articulate their past experiences, interests, and future aspirations. While sometimes challenging, this requirement encourages students to undergo a process of self-assessment and selfdevelopment. The Office of Student Fellowships and Research is committed to making the application process a worthwhile learning experience for all students, regardless of whether a fellowship is awarded.
The Office of Student Fellowships and Research works with students and alumni to identify and to apply for relevant nationally competitive fellowships and scholarships such as Fulbright, Marshall, Rhodes, and Watson. Numerous Bowdoin students receive these prestigious awards each year, enabling them to engage in a variety of activities including spending time overseas, conducting independent research, receiving support toward their undergraduate tuition, and attending graduate school.
The Office of Student Fellowships and Research also strives to inform all Bowdoin students about undergraduate research opportunities, primarily at Bowdoin, but also at institutions across the country. Each year the College awards Bowdoin research fellowships to more

## Educational Resourges and Facilities

than 200 Bowdoin students to carry out faculty-mentored research across all disciplines. A Bowdoin research fellowship allows a student to delve deeply into a research question and can lead to an enhanced independent study or honors project, co-authoring a paper with a faculty mentor, or presenting findings at a professional meeting. These research experiences enrich students' undergraduate experience, make students more competitive for entrance to graduate school, and prepare students to successfully undertake graduate study.

# Joseph MaKeen Center for the Common Good 

At the opening of Bowdoin College in 1802, President Joseph McKeen declared that:
...literary institutions are founded and endowed for the common good, and not for the private advantage of those who resort to them for education. It is not that they may be enabled to pass through life in an easy or reputable manner, but that their mental powers may be cultivated and improved for the benefit of society. If it be true, that no man should live to himself, we may safely assert, that every man who has been aided by a public institution to acquire an education, and to qualify himself for usefulness, is under peculiar obligations to exert his talents for the public good.

Encouraging students to live up to McKeen's vision is a central mission of the College as a whole, and the Joseph McKeen Center for the Common Good provides opportunities for students to discover the ways in which their unique talents, passions, and academic pursuits can be used for the "benefit of society" through public engagement.
Although housed in Banister Hall, the McKeen Center supports work that takes place across the campus, in local communities, and at selected locations around the world. The Center assists student-led volunteer organizations that provide service to the local community through activities such as mentoring, tutoring, visiting with senior citizens, serving meals at the local homeless shelter, and working with immigrant populations in nearby Portland. Fostering student initiative and leadership, the Center provides opportunities for students to propose and lead alternative winter and spring break trips that connect their peers with community organizations to address public issues in places ranging from New York City to rural Mississippi, and from northern Maine to Guatemala. The McKeen Center also encourages students to reflect upon their public engagement and connect these experiences to curricular and vocational interests.

In coordination with other departments, the Center administers summer fellowships for students interested in non-profit internships and provides grants for international service. It assists students in finding community partners with whom to engage in community-connected independent research and honors projects and helps identify courses at the College that provide context for the issues students address through their community work. The McKeen Center supports faculty in developing and teaching community-based courses that take students out of the classroom to conduct interviews, record oral histories, develop curriculum for schools, and collect scientific data in conjunction with community partners.

The Center also encourages and helps sponsor campus-wide events that challenge students, faculty, and staff to examine the varied meanings of public service and the "common good." These events include the Seeking the Common Good Series of lectures and symposia, and Common Good Day, a traditional day of service that introduces the Bowdoin community to the local community each fall.

## Information and Teghnology

Technology is embedded within the fabric of the academic and social experience. Upon arrival, students, faculty, and staff have access to the latest software, informed consultants, and targeted training to take full advantage of technical resources. The Chief Information Officer leads Information and Technology, which consults with faculty, students and staff and works in partnership with departments to provide reliable and innovative technological solutions.

Access to technology is ubiquitous. Bowdoin has one of the most wired campuses in the nation, including next generation wireless. Over 300 software packages are supported, many discipline-specific, providing students and faculty with the latest tools to assist with their studies, analysis, and research. A full-time, professionally staffed Service Desk supports Macintosh, Windows, and Linux computers and software applications. A student-run Service Desk works with students answering questions and resolving software and hardware issues throughout the day, as well as providing help during evenings and weekends. Application support is available twenty-four hours a day.

The campus has twenty academic computer labs, a 24 -hour public lab, and over thirty public printers. Students are provided e-mail accounts, network storage, video conferencing capability, satellite television, VoIP telephones, and voice mail. There is a free equipment loaner pool that includes video, sound, projection, laptops, recording devices, and digital cameras, GoPros, along with newer technology for testing and evaluation.

IT is constantly exploring technology trends while adopting the best solutions in higher education and business to deliver easily accessible, secure, stable technology services. If you have an idea or solution that uses technology to enhance the student experience, share it with—or join—the Student Information Technology Advisory Council (I.T.A.C.), a studentrun organization-it just might get funded.

## Student Affairs

A residential college adds significantly to the education of students when it provides the opportunity for a distinctive and dynamic learning community to develop. In such a community, Bowdoin students are encouraged, both directly and indirectly, to engage actively in a quest for knowledge both inside and outside the classroom, and to take responsibility for themselves, for others, and for their community. They are challenged to grow personally by constant contact with new experiences and different ways of viewing the world. Simultaneously, they are supported and encouraged by friends, faculty, staff, and other community members and find opportunities for spontaneous as well as structured activities. Such a community promotes the intellectual and personal growth of individuals and encourages mutual understanding and respect in the context of diversity.

The programs and services provided by the Division of Student Affairs exist to support students and the College in developing and maintaining the learning community. Staff throughout the Division of Student Affairs assist students with their studies, their leadership and social growth, their well-being, and their future. The Bowdoin College Student Handbook online provides comprehensive information about student life and the programs and services of the Division of Student Affairs. Additional information is available at bowdoin.edu.

## The Academic Honor and Social Codes

The success of the Academic Honor Code and Social Code requires the active commitment of the College community. Since 1964, with revisions in 1977 and 1993, the community pledge of personal academic integrity has formed the basis for academic and social conduct at Bowdoin. The institution assumes that all Bowdoin students possess the attributes implied in the codes. Bowdoin College expects its students to be responsible for their behavior on and off the campus and to assure the same behavior of their guests.
The Academic Honor Code plays a central role in the intellectual life at Bowdoin College. Students and faculty are obligated to ensure its success. Uncompromised intellectual inquiry lies at the heart of a liberal education. Integrity is essential in creating an academic environment dedicated to the development of independent modes of learning, analysis, judgment, and expression. Academic dishonesty is antithetical to the College's institutional values and constitutes a violation of the Honor Code.

The Social Code describes certain rights and responsibilities of Bowdoin College students. While it imposes no specific morality on students, the College requires certain standards of behavior to secure the safety of the College community and ensure that the campus remains a center of intellectual engagement.

Individuals who suspect violations of the Academic Honor Code and/or Social Code should not attempt to resolve the issues independently, but are encouraged to refer their concerns to the Office of the Dean of Student Affairs. The College reserves the right to impose sanctions on students who violate these codes on or off campus. A thorough description of the Academic Honor Code, the Social Code, and the disciplinary process is included in the Bowdoin College Student Handbook online.

## Officers of Instruction

Clayton S. Rose, B.A., M.B.A. (University of Chicago), M.A., Ph.D. (University of Pennsylvania), President of the College. (2015)

Lisa Ahnert, B.A. (Tunghai University), M.A. (Oberlin), Visiting Senior Lecturer in Chinese Language.

Peter J. Aicher, A.B. (Colgate), Ph.D. (North Carolina-Chapel Hill), Adjunct Lecturer in Classics.

Ericka A. Albaugh, B.A. (Pepperdine), M.A. (Tufts-Fletcher School), Ph.D. (Duke), Associate Professor of Government. (2008)

Anthony F. Antolini, A.B. (Bowdoin), M.A., M.A., Ph.D. (Stanford), Director of the Bowdoin Chorus. (1992) (Adjunct)

Hiroo Aridome, B.A. (Waseda University-Japan), M.A. (Minnesota), Senior Lecturer in Japanese. (2013)
Jason B. Archbell, B.A. (Hampden-Sydney), Coach in the Department of Athletics. (2012)
Nathan Alsobrook, A.B. (Bowdoin College), M.S. (Montana State University), Coach in the Department of Athletics. (2007)

Jennifer Baca, B.A. (Stanford), Ph.D. (California-Berkeley), CFD Postdoctoral Fellow in Latin American Studies. (2015)

Sean Barker, B.A. (Williams), M.S.. Ph.D. (Massachusetts-Amherst), Visiting Assistant Professor of Computer Science. (2014)
William Barker, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Isaac Henry Wing Professor of Mathematics. (On leave for the academic year.) (1975)

Jack R. Bateman, B.Sc. (Dalhousie), Ph.D. (Harvard), Samuel S. Butcher Associate Professor in the Natural Sciences. (On leave for the academic year.) (2008)
Mark O. Battle, B.S. (Tufts), B.M. (New England Conservatory), M.A., Ph.D. (Rochester), Associate Professor of Physics. (1999)
Thomas Baumgarte, Diplom. Ph.D. (Ludwig-Maximilians-Universität Munich), Professor of Physics. (2001)
Sarah Bay-Cheng, A.B. (Wellesley), Ph.D. (Michigan), Professor of Theater and Dance. (2015)

Rachel J. Beane, B.A. (Williams), Ph.D. (Stanford), Professor of Earth and Oceanographic Science and Liaison for Faculty. (1998)

Greg Beckett, B.A., M.A. (Western Ontario), M.A., Ph.D. (Chicago), Assistant Professor of Anthropology. (2012)
Meryem Belkaïd, M.A.-equivalent (Sciences Po), M.A.-equivalent, Ph.D. (Paris-Sorbonne), Assistant Professor of Romance Languages and Literatures. (2015)
$\dagger$ Date of first appointment to the faculty.

* Indicates candidate for doctoral degree at time of appointment.


## Officers of Instruction

Todd Berzon, B.A. (Columbia), B.A. (Oxford), M.A., Ph.D. (Columbia), Assistant Professor of Religion. (2014)

Gil Birney, B.A. (Williams), M.Div. (Virginia), Coach in the Department of Athletics. (2000)
John B. Bisbee, B.F.A. (Alfred), Adjunct Lecturer in Art.
Matthew Botsch, B.A. (Amherst), Ph.D. (California-Berkeley), Assistant Professor of Economics. (2014)

Barbara Weiden Boyd, A.B. (Manhattanville), A.M., Ph.D. (Michigan), Winkley Professor of Latin and Greek. (On leave for the fall semester.) (1980)

Margaret Boyle, B.A. (Reed), M.A., Ph.D. (Emory), Assistant Professor of Romance Languages and Literatures. (On leave for the academic year.) (2012)

Monica Brannon, B.A. (San Francisco), M.A., Ph.D. (New School for Social Research), Visiting Assistant Professor of Sociology. (2014)

Aviva Briefel, B.A. (Brown), M.A., Ph.D. (Harvard), Professor of English and Cinema Studies. (2000)

Richard D. Broene, B.S. (Hope), Ph.D. (California-Los Angeles), Professor of Chemistry. (1993)

Jackie Brown, B.A. (Hamilton), M.F.A. (Virginia Commonwealth), Assistant Professor of Art. (2014)

Jorunn J. Buckley, Cand. mag. (Oslo), Cand. philol. (Bergen), Ph.D. (Chicago), Professor of Religion Emerita. (1999) (Fall semester.)

Juan Burciaga, B.S., M.A. (Texas-Arlington), Ph.D. (Texas A\&M), Visiting Assistant Professor of Physics. (2015)

Bradford Burnham, B.S. (Maine), M.S. (Colorado State), Coach in the Department of Athletics. (2000)

Dana E. Byrd, B.A. (Yale), M.A. (Delaware), Ph.D. (Yale), Assistant Professor of Art History. (2012)

Erin W. Cady, B.A., M.S. (University of New Hampshire), Coach in the Department of Athletics. (2015)

Philip Camill III, B.A. (Tennessee), Ph.D. (Duke), Rusack Professor of Environmental Studies and Earth and Oceanographic Science. (2008)

David Carlon, B.A. (Boston University), M.S. (Massachusetts-Boston), Ph.D. (New Hampshire), Associate Professor of Biology and Director of the Bowdoin College Coastal Studies Center. (2013)

Judith S. Casselberry, B.Mus. (Berklee), M.A. (Wesleyan), M.Phil., M.A., Ph.D. (Yale), Assistant Professor of Africana Studies. (2009)

Lindsay Ceballos, B.A. (Wesleyan), M.A., Ph.D. candidate (Princeton), Visiting Instructor in Russian. * (2015)

Nadia V. Celis, B.A. (Universidad de Cartagena), M.A., Ph.D. (Rutgers), Associate Professor of Romance Languages and Literatures. (On leave for the spring semester.) (2007)

Tess Chakkalakal, B.A. (Toronto), M.A., Ph.D. (York), Associate Professor of Africana Studies and English. (2008)

Connie Y. Chiang, B.A. (California-Santa Barbara), M.A., Ph.D. (Washington), Associate Professor of History and Environmental Studies. (2002)

Sarah L. Childress, B.A. (Emory), M.A., Ph.D. (Vanderbilt), Visiting Assistant Professor of Cinema Studies. (2010)
Christopher Chong, B.S. (New Hampshire), M.S. (San Diego State University), Ph.D. (Karlsruhe Institute of Technology-Germany), Assistant Professor of Mathematics. (2015)

Jeffrey Christmas, B.S. (Appalachian State), M.M. (Boston Conservatory), Adjunct Lecturer in Music.

Sakura Christmas, A.B., Ph.D. candidate (Harvard), Instructor in History and Asian Studies.* (2015)

Eric L. Chown, B.A., M.S. (Northwestern), Ph.D. (Michigan), Professor of Computer Science. (1998)

Brock Clarke, B.A. (Dickinson), M.A., Ph.D. (Rochester), Professor of English. (2010)
David Collings, A.B. (Pacific Union), A.M., Ph.D. (California-Riverside), Professor of English. (On leave for the academic year) (1987)
Clare B. Congdon, B.A. (Wesleyan), M.S., Ph.D. (Michigan), Visiting Associate Professor of Computer Science. (2015)

Sarah O'Brien Conly, A.B. (Princeton), M.A., Ph.D. (Cornell), Associate Professor of Philosophy. (2005)

Rachel Ex Connelly, A.B. (Brandeis), A.M., Ph.D. (Michigan), Bion R. Cram Professor of Economics. (1985)

Michael Connolly, B.A. (Brandeis), Coach in the Department of Athletics. (1999)
Allison A. Cooper, B.A. (Knox), Ph.D. (California-Los Angeles), Assistant Professor of Romance Languages and Literatures. (On leave for the academic year.) (2012)

Elena Cueto Asín, B.A. (Universidad Complutense de Madrid), M.A., Ph.D. (Purdue), Associate Professor of Romance Languages and Literatures. (2000)
Songren Cui, B.A. (Zhongshan), M.A., Ph.D. (California-Los Angeles), Associate Professor of Asian Studies. (On leave for the academic year.) (1999)

Charles Cunningham, A.B. (Dartmouth), M.S, Ph.D. (Tufts), Visiting Assistant Professor of Mathematics. (2015)

Erin Curren, B.A. (Colby), M.A.-equiv. (Université Paris 7), M.A., Ph.D. (Columbia), Adjunct Lecturer in French. (2014)
Michael Danahy, B.S. (Bates), M.A., Ph.D. (Princeton), Lecturer in Chemistry. (2009)
Charlotte Daniels, B.A./B.S. (Delaware), M.A., Ph.D. (Pennsylvania), Associate Professor of Romance Languages and Literatures. (1999)

Katherine L. Dauge-Roth, A.B. (Colby), D.E.U.G. (Université de Caen), M.A., Ph.D. (Michigan), Associate Professor of Romance Languages and Literatures. (1999)

Dan Davies, B.S. (Keene State), M.Ed., M.S.P.T. (Hartford), Head Athletic Trainer. (2003)
Gregory P. DeCoster, B.S. (Tulsa), Ph.D. (Texas), Associate Professor of Economics. (1985)
Deborah S. DeGraff, B.A. (Knox College), M.A., Ph.D. (Michigan), Professor of Economics. (On leave for the academic year.) (1991)

Dallas G. Denery II, B.A. (California-Berkeley), M.A. (Dominican School of Philosophy and Theology), Ph.D. (California-Berkeley), Professor of History. (2002)

Sara A. Dickey, B.A. (Washington), M.A., Ph.D. (California-San Diego), Professor of Anthropology and Faculty Liaison for Advising. (1988)
Patsy S. Dickinson, A.B. (Pomona), M.S., Ph.D. (Washington), Josiah Little Professor of Natural Sciences. (1983)

Charles Dorn, B.A. (George Washington), M.A., (Stanford), Ph.D. (California-Berkeley), Associate Professor of Education. (2003)
Vladimir Douhovnikoff, B.A., M.S., Ph.D. (California-Berkeley), Assistant Professor of Biology. (On leave for the fall semester.) (2011)
Danielle H. Dube, B.A. (Cornell), Ph.D. (California-Berkeley), Associate Professor of Chemistry and Biochemistry. (2007)

Barbara I. Elias, B.A. (Brown), M.A., Ph.D. (Pennsylvania), Assistant Professor of Government. (2013)

Soren N. Eustis, B.A. (Grinnell), M.A., Ph.D. (Johns Hopkins), Assistant Professor of Chemistry. (On leave for the academic year.) (2012)

Susan Faludi, B.A. (Harvard), Distinguished Lecturer in Gender, Sexuality, and Women's Studies. (2013)
Gustavo Faverón Patriau, B.A., Lic. (Pontificia Universidad Católica del Perú), M.A., Ph.D. (Cornell), Associate Professor of Romance Languages and Literatures. (2005)

John M. Fitzgerald, A.B. (Montana), M.S., Ph.D. (Wisconsin), William D. Shipman Professor of Economics. (1983)

Pamela M. Fletcher, A.B. (Bowdoin), M.A., Ph.D. (Columbia), Professor of Art History. (On leave for the academic year.) (2001)
Tomas Fortson, Coach in the Department of Athletics. (2000)
Guy Mark Foster, B.A. (Wheaton), M.A., Ph.D. (Brown), Associate Professor of English. (2006)

Paul N. Franco, B.A. (Colorado College), M.Sc. (London School of Economics), Ph.D. (Chicago), Professor of Government. (1990)
Michael M. Franz, B.A. (Fairfield), M.A., Ph.D. (Wisconsin-Madison), Associate Professor of Government. (2005)

Judy Gailen, M.F.A. equiv. (Yale School of Drama), Adjunct Lecturer in Theater. (Fall semester.)
Damon P. Gannon, B.A. (Brandeis), M.A. (Bridgewater State), Ph.D. (Duke), Director of the Bowdoin Scientific Station on Kent Island and Adjunct Assistant Professor of Biology. (2008)

Davida Gavioli, B.A. (Bergamo-Italy), Ph.D. (Pennsylvania State), Senior Lecturer in Italian. (2008)

Eric C. Gaze, B.A. (Holy Cross), M.A., Ph.D. (Massachusetts-Amherst), Director of Quantitative Reasoning and Lecturer in Mathematics. (2009)
Kristen R. Ghodsee, B.A. (California-Santa Cruz), M.A., Ph.D. (California-Berkeley), Professor of Gender, Sexuality, and Women's Studies. (On leave for the academic year.) (2002)

Timothy J. Gilbride, A.B. (Providence), M.P. (American International), Coach in the Department of Athletics. (1985)

Shaun A. Golding, A.B. (Bowdoin), M.S., Ph.D. (Wisconsin-Madison), Postdoctoral Fellow in Environmental Studies. (2012)
Natasha Goldman, B.A. (Syracuse), M.A., Ph.D. (Rochester), Adjunct Lecturer in Art History. (Fall semester.)

Matthew Goldmark, B.A. (Maryland), M.A., Ph.D. (Pennsylvania), Andrew W. Mellon Postdoctoral Fellow in Spanish. (2015)
Jonathan P. Goldstein, A.B. (New York-Buffalo), A.M., Ph.D. (Massachusetts), Professor of Economics. (1979)

Cory Charles Gooding, B.A. (Haverford), M.A., M.A., Ph.D. (UCLA), CFD Postdoctoral Fellow in Government. (2014)

Celeste Goodridge, A.B. (George Washington), A.M. (William and Mary), Ph.D. (Rutgers), Professor of English. (1986)

David Gordon, B.A. (University of Cape Town), M.A., Ph.D. (Princeton), Professor of History. (2005)

Benjamin C. Gorske, B.M., B.A. (Lawrence University), Ph.D. (Wisconsin-Madison), Assistant Professor of Chemistry and Biochemistry. (2010)

Frances Gouda, B.A., M.A., Ph.D. (Washington-Seattle), Visiting Professor of Gender, Sexuality, and Women's Studies. (2014)

Theodore Greene, A.B. (Georgetown), M.A., Ph.D. candidate (Northwestern), Instructor in Sociology.* (2015)
Robert K. Greenlee, B.M., M.M. (Oklahoma), D.M. (Indiana), Professor of Music. (1982)
Elizabeth Grote, B.S. (Vermont), M.S. (New Hampshire), Coach in the Department of Athletics. (2002)
Divya Gupta, B.S., M.S. (University of Delhi), Ph.D. (Ohio State), Visiting Assistant Professor of Government and Environmental Studies. (2015)

Crystal Hall, B.A. (Cornell), M.A., Ph.D. (Pennsylvania), Associate Professor of Digital Humanities. (2013)

Morten K. Hansen, B.A., (University of Copenhagen), M.A., Ph.D. (Virginia) Andrew W. Mellon Postdoctoral Fellow in English. (2014)

Allen Harper, B.S. (Rhode Island), M.A. (Brooklyn College), Ph.D. candidate (CUNY), Visiting Instructor in Computer Science.* (Harper)

Mary Hart, B.A. (Dartmouth), M.F.A. (Bard), Visiting Assistant Professor of Art. (2015)
David Hecht, B.A. (Brandeis), Ph.D. (Yale), Assistant Professor of History and Director of First-Year Seminar Program. (2006)
Barbara S. Held, A.B. (Douglass), Ph.D. (Nebraska), Barry N. Wish Research Professor of Psychology and Social Studies. (1979)

Laura A. Henry, B.A. (Wellesley), M.A., Ph.D. (California-Berkeley), John F. and Dorothy H. Magee Associate Professor of Government. (2004)

## Officers of Instruction

Guillermo Herrera, A.B. (Harvard), M.S., M.A., Ph.D. (Washington), Associate Professor of Economics. (2000)
K. Page Herrlinger, B.A. (Yale), M.A., Ph.D. (California-Berkeley), Associate Professor of History. (1997)

Christopher Heurlin, B.A. (Carleton), M.A., Ph.D. (Washington), Assistant Professor of Government and Asian Studies. (On leave for the fall semester.) (2011)

James A. Higginbotham, B.S., A.M., Ph.D. (Michigan), Associate Professor of Classics on the Henry Johnson Professorship Fund, Associate Curator for the Ancient Collection, and Associate Dean for Academic Affairs. (1994)

Paul Holbach, B.S. (Gustavus Adolphus College), Coach in the Department of Athletics. (2007)

John C. Holt, A.B. (Gustavus Adolphus), A.M. (Graduate Theological Union), Ph.D. (Chicago), Litt.D. (University of Peradeniya), William R. Kenan Jr. Professor of the Humanities in Religion and Asian Studies. (1978)

Sree Padma Holt, B.A., M.A., Ph.D. (Andhra University), Research Assistant Professor and Administrative Director of the ISLE Program. (2003)

Russell J. Hopley, B.A. (Northwestern), M.A. (Stanford), M.A. (Loyola), Ph.D. (Princeton), Lecturer in Arabic. (2008)

Hadley Wilson Horch, B.A. (Swarthmore), Ph.D. (Duke), Associate Professor of Biology and Neuroscience. (2001)

Mary Hunter, B.A. (Sussex), M.A., Ph.D. (Cornell), A. LeRoy Greason Professor of Music. (1997)

Mohammad T. Irfan, B.S., M.S. (Bangladesh University), Ph.D. (Stony Brook), Assistant Professor of Computational Studies and Computer Science. (2013)

George S. Isaacson, A.B. (Bowdoin), J.D. (Pennsylvania), Adjunct Lecturer in Government. (Fall semester.)

William R. Jackman, B.S. (Washington-Seattle), Ph.D. (Oregon), Associate Professor of Biology. (2007)

Janice Jaffe, B.A. (University of the South), M.A., Ph.D. (Wisconsin-Madison). Visiting Assistant Professor of Romance Languages and Literatures. (2015)

Nancy E. Jennings, B.A. (Macalester), M.S. (Illinois-Urbana-Champaign), Ph.D. (Michigan State), Associate Professor of Education. (On leave for the academic year.) (1994)

Sarah Jessen, B.A. (Bryn Mawr), M.A. (Columbia), Ph.D. (New York), Visiting Assistant Professor of Education. (2015)

Xiaoke Jia, B.A. (Henan University), M.A. (Beijing Normal University), Lecturer in Chinese Language. (2013)

Amy S. Johnson, B.A. (California-Los Angeles), Ph.D. (California-Berkeley), James R. and Helen Lee Billingsley Professor of Marine Biology. (1989)

Eileen Sylvan Johnson, B.S. (Cornell), M.A. (Massachusetts-Amherst), Ph.D. (Maine), Program Manager and Lecturer in Environmental Studies. (2007)

Erin Colleen Johnson, B.A. (Warren Wilson), M.F.A. (California-Berkeley), Visiting Artist. (2015)

Gwyneth Jones, Senior Lecturer in Dance Performance. (1987)
Susan A. Kaplan, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Associate Professor of Anthropology and Director of the Peary-MacMillan Arctic Museum and Arctic Studies Center. (1985)

Kenneth Kersch, B.A. (Williams), J.D. (Northwestern), M.A., Ph.D. (Cornell), Tallman Scholar in Government. (2015)
B. Zorina Khan, B.Sc. (University of Surrey), M.A. (McMaster University), Ph.D. (CaliforniaLos Angeles), Professor of Economics. (On leave for the academic year.) (1996)
Ann Louise Kibbie, B.A. (Boston), Ph.D. (California-Berkeley), Associate Professor of English. (1989)
Abigail Killeen, B.F.A. (New York University-Tisch School), M.F.A. (Brandeis), Assistant Professor of Theater. (2008)

Michael King, B.A. (Yale), M.S., Ph.D. (Brown), Lecturer in Mathematics. (2009)
Sarah Kingston, B.A. (William and Mary), M.S. (College of Charleston), Ph.D. (Maryland), Doherty Marine Biology Postdoctoral Scholar. (2014)
Aaron W. Kitch, B.A. (Yale), M.A. (Colorado-Boulder), Ph.D. (Chicago), Associate Professor of English. (2002)
Jens Klenner, M.A. (Friedrich-Alexander Universitat), ABD (George Mason), M.A., Ph.D. (Princeton University and Universitat Konstanz), Assistant Professor of German. (2014)

Michael Klimov, B.A., M.A.-equiv. (Kyiv State Pedagogical Institute of Foreign LanguagesUkraine), Lecturer in Russian. (2013)

Matthew W. Klingle, B.A. (California-Berkeley), M.A., Ph.D. (Washington), Associate Professor of History and Environmental Studies. (2001)
Christina Knight, B.A. (Stanford), A.M., Ph.D. (Harvard), CFD Postdoctoral Fellow in Theater. (2014)

Bruce D. Kohorn, B.A. (Vermont), M.S., Ph.D. (Yale), Linnean Professor of Biology and Biochemistry. (2001)
Michael Kolster, B.A. (Williams), M.F.A. (Massachusetts College of Art), Associate Professor of Art. (2000)

Belinda Kong, B.A. (William and Mary), M.A., Ph.D. (Michigan), Associate Professor of Asian Studies and English. (2005)

Jennifer Clarke Kosak, A.B. (Harvard-Radcliffe), Ph.D. (Michigan), Associate Professor of Classics. (1999)

Michael Kowal, B.A. (Massachusetts College of Liberal Arts), M.A., Ph.D. candidate (Massachusetts-Amherst), Fellow in Digital and Computational Studies.* (2015)

Eric LaPerna, Co-Director of the Middle Eastern Ensemble. (2014)
Henry C. W. Laurence, B.A. (Oxford), Ph.D. (Harvard), Associate Professor of Government and Asian Studies. (1997)

## Officers of Instruction

Michèle LaVigne, B.A. (Hampshire), Ph.D. (Rutgers), Assistant Professor of Earth and Oceanographic Science. (2012)

Peter D. Lea, A.B. (Dartmouth), M.S. (Washington), Ph.D. (Colorado-Boulder), Associate Professor of Earth and Oceanographic Science. (1988)

Adam B. Levy, B.A. (Williams), Ph.D. (Washington), Professor of Mathematics. (1994)
Amos Libby, B.A. (Long Island University), Co-Director of the Middle Eastern Ensemble. (2014)

Brittany Lewis, B.A. (Macalester), M.A., Ph.D. (Minnesota), CFD Postdoctoral Fellow in Gender, Sexuality, and Women's Studies. (2015)

John Lichter, B.S. (Northern Illinois), Ph.D. (Minnesota), Professor of Biology and Environmental Studies. (On leave for the spring semester) (2000)

Leslie Julian Lipschitz, B.S. (Cape Town), M.S. (London School of Economics), Ph.D. (University of London), Visiting Professor of Economics. (2015)

Stephen F. Loebs, A.B. (Brown), M.H.A., M.A., Ph.D. (Michigan), Distinguished Lecturer. (Fall semester.)

Barry A. Logan, B.A. (Cornell), Ph.D. (Colorado), Professor of Biology, Associate Dean for Academic Affairs, and Associate Affirmative Action Officer. (1998)

George Lopez, B.Mus. (Hartt School of Music), M.Mus. (Sweelinck ConservatoriumAmsterdam), Beckwith Artist in Residence. (2010)

Marcos F. Lopez, B.A., B.A., M.A., Ph.D. (California-Santa Cruz), Assistant Professor of Sociology. (2013)

Suzanne B. Lovett, A.B. (Bowdoin), Ph.D. (Stanford), Associate Professor of Psychology. (1990)

Barbara R. Lyon, B.S. (Arizona State), Ph.D. (Medical University of South Carolina), Coastal Studies Scholar. (2015)

Scott MacEachern, B.A. (Prince Edward Island), M.A., Ph.D. (Calgary), Professor of Anthropology. (1995)

Stephen M. Majercik, A.B. (Harvard), M.F.A., M.B.A (Yale), M.S. (Southern Maine), Ph.D. (Duke), Associate Professor of Computer Science. (2000)

Julia Manzella, B.A. (SUNY-Genesco), M.A. (Arizona), Ph.D. (Georgia State), Visiting Assistant Professor of Economics. (2015)

Janet M. Martin, A.B. (Marquette), M.A., Ph.D. (Ohio State), Professor of Government. (On leave for the academic year.) (1986)

MaryBeth Mathews, B.A., M.A. (University of Southern Maine), Coach in the Department of Athletics. (1994)

Frank Mauceri, B.A., B.M. (Oberlin), M.M., D.M.A. (Illinois-Urbana-Champaign), Senior Lecturer in Music. (2003)

Anne E. McBride, B.S. (Yale), M.Phil. (Cambridge), Ph.D. (Colorado-Boulder), Associate Professor of Biology and Biochemistry. (2001)

Meredith McCarroll, B.A., M.A. (Appalachian State), M.A. (Simmons), Ph.D. (Tennessee), Director of Writing and Rhetoric. (2015)

Ryan McConnell, B.A. (California-Santa Cruz), M.A., Ph.D. (Illinois-Urbana-Champaign), Visiting Assistant Professor of Classics. (2014)
Sarah F. McMahon, A.B. (Wellesley), Ph.D. (Brandeis), Associate Professor of History. (1982)
Tracy McMullen, B.A. (Stanford), M.M., M.A. (North Texas), Ph.D. (California-San Diego), Assistant Professor of Music. (2012)

Terry Meagher, A.B. (Boston), M.S. (Illinois State), Associate Director of Athletics and Sidney J. Watson Coach of Men's Ice Hockey. (1983)

Stephen J. Meardon, A.B. (Bowdoin), M.A., Ph.D. (Duke), Associate Professor of Economics. (2008)
Mario Micheli, B.S.-equiv (University of Padova-Italy), M.S. (California-Berkeley), Ph.D. (Brown), Visiting Assistant Professor of Mathematics. (2015)

Alison Miller, B.A. (Ithaca), M.A. (Arcadia), Ph.D. (Columbia), Assistant Professor of Education. (2014)
John Morneau, B.M. (New Hampshire), Director of the Bowdoin Concert Band. (Adjunct.) (1988)

Stephen Morris, B.A. (Wesleyan), M.A., Ph.D. (California-San Diego), Assistant Professor of Economics. (2014)

Robert G. Morrison, A.B., A.M. (Harvard), Ph.D. (Columbia), Professor of Religion. (2008)
Madeleine E. Msall, B.A. (Oberlin), M.A., Ph.D. (Illinois-Urbana-Champaign), Professor of Physics. (1994)
James Mullen, B.F.A. (New Hampshire), M.F.A. (Indiana), Associate Professor of Art. (On leave for the academic year.) (1999)

Elizabeth Muther, B.A. (Wellesley), Ph.D. (California-Berkeley), Associate Professor of English. (1993)

Stephen G. Naculich, B.S. (Case Western Reserve), M.A., Ph.D. (Princeton), Professor of Physics. (On leave for the academic year.) (1993)

Jeffrey K. Nagle, A.B. (Earlham), Ph.D. (North Carolina), Charles Weston Pickard Professor of Chemistry. (1980)

Erik Nelson, B.A. (Boston College), M.A., Ph.D. (Minnesota), Assistant Professor of Economics. (2010)
Ingrid A. Nelson, B.A. (Wellesley), M.A., Ph.D. (Stanford), Assistant Professor of Sociology. (2010)

Michael Nerdahl, B.S., M.A., Ph.D. (Wisconsin-Madison), Lecturer in Classics. (2008)
Simbarashe Nkomo, B.S. (Bindura University-Zimbabwe), M.Ed. (University of Zimbabwe), Ph.D. (West Virginia University), Visiting Assistant Professor of Chemistry. (2014)

Erika M. Nyhus, B.A. (California-Berkeley), M.A., Ph.D. (Colorado-Boulder), Assistant Professor of Neuroscience and Psychology. (2013)

## Officers of Instruction

John D. O’Brien, B.A. (Pomona), Ph.D. (California-Los Angeles), Assistant Professor of Mathematics. (On leave for the academic year.) (2012)

Kathleen A. O’Connor, A.B. (Dartmouth), A.M., Ph.D. (Virginia), Director of the Writing Project and Lecturer in Education. (1987)

Marissa O'Neil, A.B. (Bowdoin), M.S. (Massachusetts-Amherst), Coach in the Department of Athletics. (2010)

Kristi Olson, B.A. (Indiana), J.D. (Duke), A.M., Ph.D. (Harvard University), Assistant Professor of Philosophy. (2014)

Karla Padron, B.A. (California-Los Angeles), M.A. (California State-Los Angeles), Ph.D. (Minnesota-Twin Cities), CFD Postdoctoral Fellow in Gender, Sexuality, and Women's Studies. (2015)

Michael F. Palopoli, B.S., M.S. (Michigan), Ph.D. (Chicago), Associate Professor of Biology. (1998)
H. Roy Partridge Jr., B.A. (Oberlin), M.S.W., M.A., Ph.D. (Michigan), M.Div. (Harvard), Visiting Assistant Professor of Sociology and Special Assistant to the President for Multicultural Affairs. (1994)

Jill E. Pearlman, B.A. (Beloit), M.A. (California), Ph.D. (Chicago), Senior Lecturer in Environmental Studies. (1994)

Nicola C. Pearson, B.S. (St. Mary's College, London), Associate Athletic Director and Coach in the Department of Athletics. (1996)

Stephen G. Perkinson, B.A. (Colgate), M.A., Ph.D. (Northwestern), Peter M. Small Associate Professor of Art History. (2002)

Emily M. Peterman, B.A. (Middlebury), Ph.D. (California-Santa Barbara), Assistant Professor of Earth and Oceanographic Science. (On leave for the academic year.) (2012)

Thomas Pietraho, B.A., M.S. (Chicago), Ph.D. (Massachusetts Institute of Technology), Associate Professor of Mathematics. (2001)

Brian Piper, B.S., M.S. (Northern Michigan), Ph.D. (Massachusetts-Amherst), Visiting Assistant Professor of Psychology and Neuroscience. (2015)

Frank Pizzo, A.B. (Bowdoin College), Coach in the Department of Athletics. (2008)
Christian P. Potholm II, A.B. (Bowdoin), M.A., M.A.L.D., Ph.D. (Tufts), DeAlva Stanwood Alexander Professor of Government. (1970)

Elizabeth A. Pritchard, A.B. (Boston College), M.T.S., M.A., Ph.D. (Harvard), Associate Professor of Religion. (On leave for the academic year.) (1998)

Brian Purnell, B.A. (Fordham), M.A., Ph.D. (New York University), Associate Professor of Africana Studies and History. (2010)

Samuel P. Putnam, B.S. (Iowa), M.S., Ph.D. (Pennsylvania State), Professor of Psychology. (2001)

Patrick J. Rael, B.A. (Maryland-College Park), M.A., Ph.D. (California-Berkeley), Professor of History. (1995)

Payal Ray, B.S., M.S. (University of Delhi-India), Ph.D. (Northwestern), Visiting Assistant Professor of Biology. (2015)

Amanda Redlich, B.A. (Chicago), Ph.D. (MIT), Assistant Professor of Mathematics. (2013)
Hannah Reese, B.A. (Wellesley), M.A., Ph.D. (Harvard), Assistant Professor of Psychology. (2014)

Anna Rein, M.A. equiv. (University of Pisa), Senior Lecturer in Italian. (2000)
Marilyn Reizbaum, A.B. (Queens College), M.Litt. (Edinburgh), Ph.D. (Wisconsin-Madison), Harrison King McCann Professor of English. (1984)

Manuel L. Reyes, B.S. (Westmont), Ph.D. (Berkeley), Assistant Professor of Mathematics. (On leave for the fall semester.) (2011)
Larisa Reznik, A.B. (Bowdoin), M.A., Ph.D. (Chicago), Andrew W. Mellon Postdoctoral Fellow in Religion. (2015)

Nancy E. Riley, B.A. (Pennsylvania), M.P.H., M.A. (Hawai`i), Ph.D. (Johns Hopkins), Professor of Sociology. (1992)

Meghan K. Roberts, B.A. (William and Mary), Ph.D. (Northwestern), Assistant Professor of History. (On leave for the academic year.) (2011)

Strother Roberts, B.S., M.A. (Kansas State), Ph.D. (Northwestern), Visiting Assistant Professor of History. (2015)

Davis R. Robinson, B.A. (Hampshire), M.F.A. (Boston University), Professor of Theater. (1999) (On leave for the spring semester.)

Collin Roesler, B.S. (Brown), M.S. (Oregon State), Ph.D. (Washington), Professor of Earth and Oceanographic Science. (On leave for the academic year.) (2009)

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Andrew C. Rudalevige, B.A. (Chicago), M.A., Ph.D. (Harvard), Thomas Brackett Reed Professor of Government. (2012)

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John D. Cullen, A.B. (Brown), Coach in the Department of Athletics Emeritus. (1985)
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A. Myrick Freeman III, A.B. (Cornell), A.M., Ph.D. (Washington), William D. Shipman Professor of Economics Emeritus. (1965)
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## Officers of Instruction Emeriti

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Jane E. Knox, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas-Austin), Professor of Russian Emerita. (1976)

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O. Jeanne d'Arc Mayo, B.S., M.Ed. (Boston), Physical Therapist and Trainer Emerita in the Department of Athletics. (1978)

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John McKee, A.B. (Dartmouth), A.M. (Princeton), Associate Professor of Art Emeritus. (1962)

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David S. Page, B.S. (Brown), Ph.D. (Purdue), Charles Weston Pickard Professor of Chemistry and Biochemistry Emeritus. (1974)
Rosa Pellegrini, Diploma Magistrale (Istituto Magistrale "Imbriani" Avellino), Adjunct Lecturer in Italian Emerita. (1983)

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Daniel W. Rossides, B.A., Ph.D. (Columbia), Professor of Sociology Emeritus. (1968)
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Melinda Y. Small, B.S., A.M. (St. Lawrence), Ph.D. (Iowa), Professor of Psychology Emerita. (1972)

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