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# Bowdoin 

2011-2012 CATALOGU1T

August 2011
Brunswick, Maine bowdoin.edu/catalogue

# Bowdoin 2011-2012 CATALOGUE 



August 2011
Brunswick, Maine bowdoin.edu/catalogue

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, etbnicity, 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, Bowdoin College reserves the right to make changes at any time without prior notice to any of the information, including but not limited to course offerings, degree requirements, regulations, policies, procedures, and charges. The College provides the information berein solely for the convenience of the reader, and to the extent permissible by lany, expressly disclaims any liability that may othervise be incurred.

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.

Bowdoin College and the other members of the New England Small College Atbletic Conference take strong stands against abusive drinking and its negative side effects. The vast majority of students at these colleges who choose to drink alcobol do so responsibly. Those who abuse alcohol receive a combination of discipline and education. Additionally, all of the member schools expressly probibit hazing.

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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 6-8.

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

Enrollment: The student body numbers about 1,750 students (49 percent male, 51 percent female; last two classes $49 / 51$ percent); about 250 students study away one or both semesters annually; 91 percent complete the degree within five years.

Faculty: Student/faculty ratio 9:1; the equivalent of 193 full-time faculty in residence, 99 percent with Ph.D. or equivalent; 31 head athletic coaches.

Geographic Distribution of Students: New England, 41.7 percent; Middle Atlantic states, 22.1 percent; Midwest, 8.9 percent; West, 11.1 percent; Southwest, 3.5 percent; South, 7.4 percent; international, 5.3 percent. Fifty states, the District of Columbia, Puerto Rico, and thirty-one countries are represented. Minority and international enrollment is 34 percent.
Statistics: As of June 2011, 36,936 students have matriculated at Bowdoin College, and 28,803 degrees in academic programs have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni/ae include 18,617 graduates, 2,162 nongraduates, 126 honorary degree holders ( 41 alumni/ae, 85 non-alumni/ae), 27 recipients of the Certificate of Honor, and 234 graduates in the specific postgraduate program.

Offices and Office Hours: The Admissions Office is located in Burton-Little House. 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. Business offices and the Human Resources Office are in the McLellan Building at 85 Union 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 24 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 Catalogue can be found at bowdoin.edu/catalogue/.

## College Calendar

Unless othervise indicated, regular class schedules are in effect on bolidays listed.

## 210th Academic Year (proposed calendar subject to change)

2011

August 1, Monday
August 23-27, Tues.-Sat.
August 27, Saturday
August 27-31, Sat.-Wed.
August 30, Tuesday
August 30, Tuesday

August 31, Wednesday
September 1, Thursday
September 5, Monday
September 17, Saturday
September 22-24, Thurs.-Sat.

September 28-30, Wed.-Fri.
October 7, Friday

October 7-8, Fri.-Sat.

October 12, Wednesday
October 13-15, Thurs.-Sat.
October 14-16, Fri.-Sun.
October 28, Friday
October 28-30, Fri.-Sun.
November 23, Wednesday

November 28, Monday
December 9, Friday
December 10-13, Sat.-Tues.
December 14-19, Wed.-Mon.
December 20, Tuesday
December 23, Friday
December 26, Monday
December 30, Friday

Ramadan begins at first light
Pre-Orientation Trips
College housing ready for occupancy for first-year students only, 9:00 a.m.
Orientation
Ramadan ends at last light
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 (College holiday, many offices closed)
Common Good Day
Alumni Council, Alumni Fund Directors, and BASIC
National Advisory Board meetings
Rosh Hashanah, begins at sunset on Sept. 28 and concludes at sunset on Sept. 30
Fall vacation begins after last class; Note: Columbus Day is Monday, Oct. 10
Yom Kippur, begins at sunset on Oct. 7 and concludes at sunset on Oct. 8
Fall vacation ends, 8:00 a.m.
Meetings of the Board of Trustees
Homecoming Weekend
Sarah and James Bowdoin Day
Parents Weekend
Thanksgiving vacation begins, 8:00 a.m.* (November 23-
25: College holidays, many offices closed)
Thanksgiving vacation ends, 8:00 a.m.
Last day of classes
Reading period
Fall semester examinations
College housing closes for winter break, noon
Christmas Eve holiday observed (College holiday, many offices closed)
Christmas holiday observed (College holiday, many
offices closed)
New Year's Eve holiday observed (College holiday, many offices closed)

| January 2, Monday | New Year's Day holiday observed (College holiday, many offices closed) |
| :---: | :---: |
| January 16, Monday | Martin Luther King Jr. Day (College holiday, many offices closed) |
| January 21, Saturday | College housing available for occupancy, 8:00 a.m. |
| January 23, Monday | Spring semester classes begin, 8:00 a.m. |
| February 9-11, Thurs.-Sat. | Meetings of the Board of Trustees |
| February 20, Monday | Presidents' Day, classes in session (College holiday, many offices closed) |
| March 9, Friday | Spring vacation begins after last class |
| March 10, Saturday | College housing closes for spring vacation, noon |
| March 24, Saturday | College housing available for occupancy, 8:00 a.m. |
| March 26, Monday | Spring vacation ends, 8:00 a.m. |
| March 29-31, Thurs.-Sat. | Alumni Council, Alumni Fund Directors, and BASIC National Advisory Board meetings |
| April 6, Friday | Good Friday |
| April 6-14, Fri-Sat. | Passover, begins at sunset on April 6 and concludes at sunset on April 14 |
| April 8, Sunday | Easter |
| May 9, Wednesday | Last day of classes; Honors Day |
| May 10-12, Thurs.-Sat. | Meetings of the Board of Trustees |
| May 10-13, Thurs.-Sun. | Reading period |
| May 14-19, Mon.-Sat. | Spring semester examinations |
| May 20, Sunday | College housing closes for non-graduating students, noon |
| May 25, Friday | Baccalaureate |
| May 26, Saturday | The 207th Commencement Exercises |
| May 26, Saturday | College housing closes for graduating students, 6:00 p.m. |
| May 28, Monday | Memorial Day (College holiday, many offices closed) |
| May 31-June 3, Thurs.-Sun. | Reunion Weekend |
| July 4, Wednesday | Fourth of July holiday (College holiday, many offices closed) |

## Notes:

Regular class schedules in effect on holidays listed unless otherwise noted. Staff, check with supervisor to determine if office is closed.
*Wednesday, November 23 classes will be rescheduled on a class-by-class basis by the course instructor.


## 2012

| January       <br> SUN MON       <br> SUE WEO THU FRI SAT    <br> 1 2 3 4 5 6 7 <br> 8 9 10 11 12 13 14 <br> 15 16 17 18 19 20 21 <br> 22 23 24 25 26 27 28 <br> 29 30 31     |
| :--- |


| April |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SUN |  |  |  |  |  |  |
| MON | TUE | WEO | THU | FRI | SAT |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 |  |  |  |  |  |

February
sun mon tue wed thu fri sat

|  |  |  | 1 | 2 | 3 | 4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 |  |  |  |


| May |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUN | MON | $\begin{gathered} \text { TUE } \\ 1 \end{gathered}$ | $\begin{gathered} \text { WEO } \\ 2 \end{gathered}$ | $\begin{gathered} \text { THU } \\ 3 \end{gathered}$ | $\begin{gathered} \text { FRI } \\ 4 \end{gathered}$ | $\begin{gathered} \text { SAT } \\ 5 \end{gathered}$ |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 |  |  |

March
SUN MON TUE WEO THU FRI SAT

| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |

$\begin{array}{lllllll}11 & 12 & 13 & 14 & 15 & 16 & 17\end{array}$
$\begin{array}{lllllll}18 & 19 & 20 & 21 & 22 & 23 & 24\end{array}$
$\begin{array}{lllllll}25 & 26 & 27 & 28 & 29 & 30 & 31\end{array}$

## June

SUN MON TUE WED THU FRI SAT

| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\begin{array}{lllllll}10 & 11 & 12 & 13 & 14 & 15 & 16\end{array}$
$\begin{array}{lllllll}17 & 18 & 19 & 20 & 21 & 22 & 23\end{array}$
$\begin{array}{lllllll}24 & 25 & 26 & 27 & 28 & 29 & 30\end{array}$

## 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 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 the Bowdoin supplement. 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 9, 2011.

All Early Decision and Regular Decision admissions decisions for U.S. 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-U.S. 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 at Bowdoin, page 11, for more details.

More information: bowdoin.edu/admissions/.

## Financial Aid

At Bowdoin, more than 40 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 need to be repaid. With the exception of transfer, international, and admitted wait-list students, admission to Bowdoin is "need blind"-that is, students are admitted without regard to their economic need.

Eligibility for Bowdoin grant assistance is "need based," determined through analysis of income, asset, and tax 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.

Eligibility for Bowdoin grant assistance is based on a proprietary need analysis system developed over many years and modeled after the College Board's institutional methodology (IM). Eligibility for state and federal assistance is based on the federal methodology (FM). As such, awards may vary from college to college, depending on the need analysis methodology employed.

Grant awards are based on a family's financial capacity to contribute to college costs, as determined by the College. Willingness to contribute does not influence financial aid decisions. Financial aid is intended to supplement family resources to enable students from all economic backgrounds to attend Bowdoin.
Bowdoin meets calculated need with student employment funds and grant money from federal, state, and institutional sources. If parents need help paying remaining billed charges, students may elect to borrow up to $\$ 5,500$ in low interest, federal Stafford loan money.

Most Bowdoin students work during the summer and more than 750 students work on campus to pay for books, supplies, personal expenses, and travel.
In most cases, receipt of private merit 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.
Bowdoin's need analysis practices are based on principles of fairness and equal treatment. Families with similar financial circumstances receive similar levels of grant support.

More information: bowdoin.edu/studentaid/.

## Expenses

## College Charges

Fees for the 2011-2012 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* | $\$ 21,193$ | $\$ 42,386$ |
| Housing | 2,727 | 5,454 |
| Board (19-meal plan) | 3,100 | 6,200 |
| Student Activities Fee* | 215 | 430 |
| Class Dues*: |  |  |
| Seniors | 30 | 60 |
| 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 2011-2012 is $\$ 1,000$ per program.

## Registration and Enrollment

All continuing students are required to register for courses during registration week of 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. $\qquad$ 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 needs on a preference card issued by the Residential Life Office during the summer preceding their arrival at Bowdoin. The director of Residential Life coordinates housing accommodations for the remaining classes through a lottery system.

Residence hall suites consist of a study and bedroom, provided with essential furniture. Students should furnish blankets and pillows; linen and laundry services are available at moderate cost. College property is not to be removed from the building or from the room in which it belongs; occupants are held responsible for any damage to their rooms or furnishings.
Board charges are the same regardless of whether a student eats at the Moulton Union 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 basic, full-year accident and sickness insurance plan costs $\$ 1,104$. The cost for the extended plan is $\$ 1,521$.
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 21-34). 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 either 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 30 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. Bowdoin does not have its own in-house payment plan. Students may choose from two outside installment payment plan agencies offered: SallieMae's TuitionPay and Tuition Management Systems (TMS). Credit cards are not accepted by Bowdoin College 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 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 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 distribution requirements encourage exploration and broaden students' capacities to view and interpret the world from a variety of perspectives; the major program challenges students to develop a deeper understanding and self-assurance as independent and creative contributors to an area of study. Throughout their four years, students build intellectual capabilities, self-confidence 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.

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. Students choose a major, using the departmental or interdisciplinary approaches available at Bowdoin, as a way to engage a discipline in depth. Furthermore, they must distribute their courses across the curriculum in order to broaden awareness of the varying ways that academic fields make sense of the world.

Bowdoin offers a course of study leading to the degree of Bachelor of Arts. The College requires students to seek breadth in their education through a modest set of distribution and division requirements that stimulate students to explore the curriculum more widely on their own. To graduate, a student must also complete an approved major.

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 of 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 by early in the fourth semester of their college enrollment and afterwards are advised by members of their major departments.

## The Curriculum

## 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;

By the end of the second semester in college, completed a first-year seminar;
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) 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 scientific literacy through an acquaintance with the natural sciences and with the types of inquiry in those disciplines, developed by engagement in active and rigorous study of scientific problems. (Designated by INS following a course number in the course descriptions.)
Exploring Social Differences. These courses develop awareness, understanding, and skills of analysis for examining differences such as those in class, environmental resources, ethnicity, gender, race, religion, and sexual orientation across and within societies and the ways that these are reflected in and shaped by historical, cultural, social, political, and economic processes. (Designated by ESD following a course number in the course descriptions.)
International Perspectives. These courses assist students in gaining a critical understanding of the world outside the United States, both contemporary and historical. (Designated by IP following a course number in the course descriptions.)
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

## The Curriculum

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 not be counted if they are elected to be taken on a nongraded (Credit/D/Fail) basis, though courses will count if they are required to be taken on a nongraded basis. 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 not be met if the seminar is taken on a nongraded (Credit/D/Fail) basis.

## 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 not be counted if they are elected to be taken on a nongraded (Credit/D/Fail) basis, though courses will count if they are required to be taken on a nongraded basis. 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 are presented in detail in the section describing the courses offered by each department, beginning on page 39. Interdisciplinary majors are described beginning on page 197.

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 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 interdisciplinary and student-designed majors. These are described below.

## Departmental and Program Majors

Departmental and program majors are offered in the following areas:

| Africana Studies | German |
| :--- | :--- |
| Anthropology | Government and Legal Studies |
| Art History | History |
| Asian Studies | Latin American Studies |
| Biochemistry | Mathematics |
| Biology | Music |
| Chemistry | Neuroscience |
| Classical Archaeology | Philosophy |
| Classical Studies | Physics |
| Classics | Psychology |
| Computer Science | Religion |
| Earth and Oceanographic Science | Romance Languages |
| Economics | Russian |
| English | Sociology |
| French | Spanish |
| Gender and Women's Studies | 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 126-39.

## 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
> Earth and Oceanographic Science and Physics
> English and Theater
> Eurasian and East European Studies
> Mathematics and Economics

For complete descriptions of these interdisciplinary majors, see pages 197-201.
A student may take the initiative to develop an interdisciplinary major not specified in the Catalogue by consulting with the chairs of the two major departments. Students who do so must have their program approved by the Curriculum Implementation Committee. Students

## The Curriculum

must submit their proposals to the Curriculum Implementation Committee by December 1 of their sophomore year. 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 | Gay and Lesbian Studies* <br> Anthropology <br> Gender and Women's Studies |
| :--- | :--- |
| Art (Art History or Visual Arts) | German |
| Asian Studies | Government and Legal Studies |
| Biology | History |
| Chemistry | Latin American Studies |
| Classics (Greek, Latin, Classics, | Mathematics |
| Archaeology, or Classical Studies) | Music |
| Computer Science | Philosophy |
| Dance* | Physics |
| Earth and Oceanographic Science | Psychology |
| Economics (Economics or | Religion |
| $\quad$ Economics and Finance) | Romance Languages |
| Education* (Education Studies | (French, Italian, or Spanish) |
| $\quad$ or Teaching) | Russian |
| English | Sociology |
| Environmental Studies | Theater* |
| Film Studies* |  |

[^0]
## Academic Standards and Regulations

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 wotk. 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.

## Course Load

All students at Bowdoin are full-time students and, in order to make normal progress toward the degree, are expected to enroll in no fewer than four credits each semester. 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 he or she 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 enrolled. Students who do not attend the first meeting may be dropped from the course at the discretion of the instructor, but only if the demand for the course exceeds the enrollment limit. Otherwise, Bowdoin has no class attendance requirements, but 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 Center or the Counseling Service. Students bear ultimate responsibility for arranging makeup 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 published each semester by the Office of the Registrar. No examinations may be given nor extra classes scheduled during Reading Period. 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 p.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 Dean's Office.
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:

2011:
Rosh Hashanah* Yom Kippur*
2012:
Martin Luther King Jr. Day
First Day of Passover
Good Friday
Easter

September 28-30
October 7-8

January 16
April 6
April 6
April 8

* Holidays begin at sundown on the earlier date shown.


## Course Registration and Course Changes

Registration for each semester is completed by submitting the Course Registration Card. Since most courses have maximum and minimum enrollment limits, as well as course prerequisites or enrollment priorities, students cannot be certain they will be enrolled in their top-choice courses. Consequently, the registration card should list four full-credit courses and up to two alternate courses for each. The card must be signed by the pre-major academic advisor (first-year students and sophomores) or the major department advisor(s) (juniors and seniors), and must be presented to the Office of the Registrar by $5: 00$ p.m. on the day specified in the registration instructions. Students receive initial notification of their courses within a few days, and Phase II Registration then gives students the opportunity to adjust their schedules. Students who are studying away are strongly encouraged to register at the same time that students are registering on campus; the Office of the Registrar website provides the necessary schedules and forms so that registration may be done electronically. All registration information may be found on the website at bowdoin.edu/registrar.
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. Enrollment 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.

Once classes begin, students may adjust their course schedules by submitting an Add/ Drop card to the Office of the Registrar. Students have two weeks to make the necessary adjustments to their schedules. An instructor will allow a student to add a course if the following three conditions have been met: (1) the student has the necessary qualifications, including but not limited to the course prerequisites; (2) the approved maximum class size limit has not been reached; and (3) the student and instructor have agreed on how missed class material and assignments will be managed. No course may be added or dropped after the second week of classes. Students in their first semester at Bowdoin, however, have an extended drop period of six weeks; this longer period for new students recognizes the fact that new students sometimes undergo a period of adjustment to college-level work. Anyone who wants to add or drop a course after the two-week deadline must petition the Recording Committee, except for first-semester students who may drop through the sixth week with the permission of their dean and advisor. Generally petitions are only approved if the student can show extreme personal or medical reasons for the lateness of the change. Any course dropped after the deadline will appear on the transcript with a grade of W (for withdrew). Late adds will require that the student has been attending the course from the very beginning of the semester. Documentation may be required. Course changes made after the deadline 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 he or she has completed and submitted the forms to register for or add the course. Also, a student will receive a failing grade for a course he or she stops attending unless a drop form has been completed and submitted before the deadline. Students are expected to monitor their records in Bearings, the College's student information system; this includes monitoring the courses for which they are registered. The student bears ultimate responsibility for completing and submitting forms 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, the Recording Committee, upon recommendation of the department, may extend credit for additional semester courses beyond two.

There are normally two kinds of independent study and each should be registered for under the appropriate course number. A directed reading course designed to allow a student to explore a subject not currently offered within the curriculum shall be numbered 291, 292, 293, or 294 . An independent study that will culminate in substantial and original research; or in a fine arts, music, or creative writing project; or that is part of a departmental honors program shall be numbered 401 or higher. Independent study 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 submituing at the end of each semester, except the last, a grade of S (for Satisfactory) in place of a regular grade. Regular grades shall be submitted at the end of the final semester and shall become the grades for the individual semesters of the course.

## Academic Standards and Regulations

## 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 Bearings 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. 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 a dean, 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.

## Credit/D/Fail Option

A student may choose to take a limited number of courses on a Credit/D/Fail basis as opposed to a graded basis. Courses to be taken on a Credit/D/Fail basis should be so indicated on the Registration Card or Add/Drop Card. If a student chooses this option, 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.

Each semester, a student may elect no more than one course of the normal four-credit course load on a Credit/D/Fail basis, although a student may elect a fifth course any semester on a Credit/D/Fail basis. No more than four of the thirty-two courses required for graduation may be taken on a Credit/D/Fail basis; courses in excess of the thirty-two required may be taken for Credit/D/Fail without limit as to number. Courses that can only be taken Credit/D/Fail (music ensemble and dance and theater performance courses) are not counted within these restrictions.

Most departments require that all courses taken to satisfy requirements of the major be graded. Courses taken to satisfy the College's requirement for a first-year seminar must be graded, and courses satisfying distribution and division requirements must also be taken on a graded basis. No course may be changed from graded to Credit/D/Fail or vice versa after the sixth week of classes.

## 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 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 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, Failure, and Distinction Cards

Faculty should communicate the progress of students in their classes periodically through Comment Cards. The written observations alert students, academic advisors, and the deans 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 comment cards are used for warning purposes, 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. In some cases, when a student has performed exceptionally well or has accomplished something that is particularly noteworthy, an instructor may issue a Distinction Card at the end of the semester.

## Transcripts

The Office of the Registrar will furnish official transcript copies upon written request. There is no charge for transcripts unless it is requested that materials be sent by an overnight delivery service.

## Academic Standards and Regulations

## Statement of Student Responsibility

The College Catalogue is available online to every Bowdoin student at bowdoin.edu/catalogue. Also, students have access to their academic records on Bearings, 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 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, only the first grade will be 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. In general, each semester's work on an honors project will be considered an independent study numbered 401 or higher until the honors project is completed. Students must complete an honors project to be eligible for departmental or program honors. 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.

All written work in independent study accepted as fulfilling the requirements for departmental honors is to be deposited in the College Library in a form specified by the Library Committee.

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

The 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 all eligible 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 and seven credits of which were graded or non-elective Credit/D/Fail. In other words, among the eight required full-credit courses or the equivalent, a maximum of two credits may be taken Credit/D/Fail, but only one credit may be for a course(s) the student chose to take Credit/D/Fail. 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 26.

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 directly.

## Deficiency 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. When a student's academic standing changes, copies of correspondences 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;
2. Receive one D while on academic probation;
3. Receive during their tenure at Bowdoin a cumulative total of four Ds or some equivalent combination of Fs and Ds where one F is equivalent to two Ds.

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 graded full-credit courses while on academic probation. Students on academic probation normally are not eligible to study away.

## Academic Standards and Regulations

## 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;
2. Receive one F or two Ds while on academic probation;
3. Receive during their tenure at Bowdoin a cumulative 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 twice each year, once in June and once in mid-December. 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 registration information to the student's Bowdoin e-mail address. 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 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 cumulative total of nine Ds or some equivalent combination of Fs and Ds where one $F$ is equivalent to two Ds.

## Other Agademic 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 entolled 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 materials 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 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 Dean of Student Affairs Office and online at bowdoin.edu/studentaffairs/. 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 he or she 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 he or she 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/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 $\mathrm{s} /$ he no longer requires a hospital setting

## Academic Standards and Regulations

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 as to 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 specialty/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, the 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 Dean's Office 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 Off-Campus Study.
Course Registration: Once the student on Medical Leave has been readmitted to the College, he or she will be able to participate in course registration. Course registration materials 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 Medical Leave.

Educational Record Refection: 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, the courses will be listed and a grade of "W" (withdrew) will appear. 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, his or her coverage will continue as specified by the policy. If the student waived Bowdoin's plan, he or she 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, he or she 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, he or she 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.

## 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 38.)

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. The College does not grant credit for professional or vocational study at other institutions.
A student may transfer a cumulative total of no more than four credits from study in summer school programs. The College does not regularly grant credit for work completed through twoyear institutions, correspondence courses, online distance education courses, or abbreviated winter terms ("Jan Plans"). 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 entollment at another institution. The Application for Transfer of Credit requires the approval of the advisor and the appropriate Bowdoin department chair as well as the Catalogue description and syllabus of each course for which credit is desired. 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 advisor, department chair, or Recording Committee 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 taken on an ungraded basis.

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. 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 (or more) 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.

## Graduation

Students must complete and 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. 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 final grades for the spring semester have been received and all academic work has been completed.
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 decide at some future date to wish 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.

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 the 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 Leave, 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 Leave, 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.

## Special Agademic Programs

## Architectural Studies

Although the College offers no special curriculum leading to graduate study in architecture and no major in architecture, students can combine art and architecture studio courses with others in art history, environmental studies, physics, and other related disciplines to prepare for architectural study. The architecture studio course is intended to develop the ability to conceive and communicate architecturai and spatial concepts in two and three dimensions. Interested students should speak with members of the Visual Arts Division of the Department of Art, with members of the Environmental Studies Program, or with members of Bowdoin Career Planning staff as early in their Bowdoin careers as possible.

## 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, and environmental issues involving Arctic lands and peoples. Students interested in the Arctic are encouraged to consult with the director of the Arctic Studies Center in order to plan an appropriate interdisciplinary program involving course work and 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. While the College does not offer a formal curriculum devoted to coastal studies, students can take courses focused on coastal issues in a variety of departments and programs including biology, earth and oceanographic science, government, economics, English, visual arts, sociology, anthropology, and environmental studies. Many of the courses take advantage of 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. A number of coastal studies summer research fellowships are available annually to students. Interested students should speak with members of the Coastal Studies Faculty Advisory Committee and Rosemary Armstrong, the Coastal Studies Program coordinator, for guidance in selecting courses with a coastal component and for more information about summer research fellowships.

## Engineering (3-2 Option; 4-2 Option)

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

Qualified students in the shared studies program may transfer into the third year of the engineering program at Columbia or the University of Maine after three years at Bowdoin. Columbia also offers a 4-2 option, which may be of interest to some students.

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

Caltech invites students of superior academic achievement from a select group of liberal arts colleges 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.
All students must take Physics 103, 104, 223, 229, and Physics 300 or Mathematics 224; Chemistry 102 or 109; Mathematics 161, 171, and 181; and Computer Science 101. They are also expected to have completed at least ten semester courses outside of mathematics and science, one of which should be in economics. Some programs at the University of Maine have additional course requirements in mathematics and science, and interested students should contact the engineering advisor for more information. These courses, together with the engineering courses, substitute for the major requirements in physics for 3-2 students. The successful student earns a bachelor of science degree from the engineering school after completing the two years of the engineering program and earns a bachelor of arts degree from Bowdoin at the end of their fifth year for all programs except Dartmouth's. For the Dartmouth program, the engineering courses are used as transfer credits to complete the Bowdoin degree in physics, conferred after the senior year. The Dartmouth engineering degree is conferred upon successful completion of a fifth year in engineering at Dartmouth. 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 Professor Dale Syphers in the Department of Physics and Astronomy. It is important for students to get advising about the program early in their career at Bowdoin. Students interested in the program, and those seeking advising, should first contact Gary Miers in the Department of Physics and Astronomy.

## First-Year Seminars

The purpose of the first-year seminar program is to introduce students to college-level disciplines and to lead students to understand the ways in which a specific discipline may relate to other areas in the humanities, social sciences, and sciences. Each seminar places an emphasis upon the improvement of students' skills--their ability to read texts effectively and to write prose that is carefully organized, concise, and firmly based upon evidence.

A complete listing of first-year seminars being offered in the 2011-2012 academic year can be found on pages 141-51.

## 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 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 Richard E. Morgan during their first year at Bowdoin.

## Teaching

Students interested in teaching in schools or enrolling in graduate programs in education should discuss their plans with personnel in the Department of Education. Because courses in education, along with a major in a teaching field, are necessary for certification, it is wise to begin planning early so that schedules can be accommodated. (For information on the Bowdoin Teacher Scholars program, see pages 110-11.) An extensive resource library in Bowdoin Career Planning contains information about graduate programs, summer and academic year internships, volunteer opportunities with youth, and public and private school openings. Career advising and credential file services are also available.

## Off-Campus Study

Students are encouraged to broaden and enrich their education through participation in semester- and year-long programs of off-campus study. Whether off-campus study occurs abroad or in the United States, the College regards it 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 comparable in intellectual challenge to work done 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 Off-Campus Study. If the student wishes to count credits earned in the program toward the major, the approval of the major department is required as well. Students contemplating offcampus study should consult the online Guidelines for Off-Campus Study published by the Office of Off-Campus Study; they are urged to begin planning early in the academic year before that in which they hope to study away, and must complete a request for permission to study away by Bowdoin's application deadline. (Application deadlines for individual programs vary considerably; it is the responsibility of the student to determine these deadlines and ensure that they are met.) 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 OffCampus Study, which may be found at bowdoin.edu/ocs/choosing/options-list.shtml.

## Courses of Instruction

The departments of instruction in the following descriptions of courses are listed in alphabetical order. 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 2011; 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 science 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 enroll in the course.
Course Numbering. Courses are numbered according to the following system:

| $10-29$ | First-year seminars |
| :--- | :--- |
| $30-99$ | Courses intended for the nonmajor |
| $100-199$ | General introductory courses |
| $200-289$ | General intermediate-level courses |
| $291-299$ | Intermediate independent study |
| $300-399$ | Advanced courses and senior seminars |
| $401-404$ | Advanced independent study: Original or creative |
| $451-452$ | projects and honors courses |

## Africana Studies

Olufemi Vaughan, Program Director<br>Glynis Wears-Siegel, Program Coordinator

Professor: Olufemi Vaughan (History)
Assistant Professors: Judith S. Casselberry, Tess Chakkalakal $\dagger$ (English), Brian Purnell
Fellow: Tristan Cabello
Contributing Faculty: Ericka A. Albaught, Peter Coviello, Guy Mark Foster, David Gordon, David Hecht, Aaron Kitch, Scott MacEachern, James W. McCalla*, Dhiraj Murthy $\dagger$, Elizabeth Muther*, H. Roy Partridge, Patrick J. Raelt, Jennifer Scanlon, Hanétha Vété-Congolo $\dagger$, Anthony Walton

The Africana Studies Program at Bowdoin College, like many others in the country, grew out of the African American freedom movement of the 1960s. In recent decades, the program has grown into a dynamic interdisciplinary field that engages the historical, political, social, economic, and cultural experiences of African Americans and other peoples of African heritage in the Americas, Africa, Europe, and other regions of the world. From national, transnational, and diasporic perspectives, Africana studies courses draw from the expertise of our distinguished faculty in various disciplinary and interdisciplinary programs in the humanities and social sciences. Africana studies faculty members explore a variety of theoretical and methodological perspectives, and are deeply committed to encouraging our students, especially majors and minors, to acquire the essential analytical, writing, and communication skills that will prepare them for the modern professions and postgraduate studies.

## Requirements for the Major in Africana Studies

The major in Africana studies will consist of nine interdisciplinary and disciplinary courses in African American, African diaspora, and African studies. The course requirements for the major in Africana studies are outlined in the following categories:

## 1. Introduction to Africana Studies (Africana Studies 101)

2. Intermediate Seminar in Africana Studies (see list of seminars below)

## 3. Senior Seminar in Africana Studies (Africana Studies 301)

4. Six additional courses drawn from two tracks in Africana studies. The tracks in Africana studies are: (a) African American Studies (Africana studies courses on the national black experience in the United States); and (b) African and African Diaspora Studies (Africana studies courses on African regional, transregional, and African diaspora themes)
5. Students are required to take at least one course from the track that is not their primary concentration. For example, one course from the African American Studies track will be required of students in the African and African Diaspora Studies track.
6. Independent study and off-campus electives: prospective majors in Africana studies can take a maximum of two courses either as independent study, or they may take courses at other colleges/universities, or students may take one course each from either of these two categories towards one of the tracks in Africana studies. Africana studies majors should consult with the Africana Studies Program director or their Africana studies faculty advisor before making a final decision on study abroad and or taking courses at other colleges/universities.
7. A first-year seminar in Africana studies will count towards the courses required as electives for the major in Africana studies. A first-year seminar can satisfy either of the two tracks in Africana studies.
8. At least five of the courses from either of the two tracks must be at the 200 and 300 levels. Courses that will count toward the major must be taken on a graded basis (not Credit/D/Fail), and students must earn grades of C- or better in these courses. See the list of the courses for the two Africana studies tracks below.

For more information and clarification on the major requirements in Africana studies, prospective majors are encouraged to consult with the Africana Studies Program director or a faculty member in the Africana Studies Program by the fall semester of their junior year.

## Requirements for the Minor in Africana Studies

The minor in Africana studies will consist of five disciplinary and interdisciplinary courses in African American, African, and African Diaspora Studies. The course requirements for the minor in Africana studies are outlined in the following categories:

1. Introduction to Africana Studies (Africana Studies 101)
2. Four Africana Studies elective courses from any of the two Africana studies tracks. Three of these courses must be at the 200 and 300 levels. Only one of these four electives can be an independent study course or a course taken at other colleges/universities. Courses that will count toward the minor must be taken on a graded basis (not Credit/D/Fail), and students must earn grades of C - or better in these courses.
3. A first-year seminar in Africana studies will count towards the minor in Africana studies.

Students considering a minor in Africana studies are encouraged to consult with the Africana Studies Program director by the fall semester of their junior year.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
10b. Racism. Fall 2011. Spring 2012. Roy Partridge. (Same as Sociology 10.)
12c. Affirmative Action and United States Society. Fall 2011. Brian Purnell.
[13c. From Montezuma to Bin Laden: Globalization and Its Critics. (Same as History 16.)]

14c. African American Writers and the Short Story. Fall 2011. Guy Mark Foster. (Same as English 12 and Gender and Women's Studies 14.)
[25c. The Civil War in Film. (Same as History 25.)]

## Introductory, Intermediate, and Advanced Courses

101c. Introduction to Africana Studies. Every fall. Fall 2011. Judith Casselberry.
Focuses on major humanities and social science disciplinary and interdisciplinary African American and African diaspora themes in the context of the modern world. The African American experience discussed in its appropriate historical context, emphasizing its important place in the history of the United States and connections to African diasporic experiences, especially in the construction of the Atlantic world. Material covered chronologically and thematically, building on historically centered accounts of African American, African diaspora, and African experiences. Introduces prospective Africana Studies majors and minors to the

## Courses of Instruction

intellectually engaging field of Africana Studies; provides an overview of the major theoretical and methodological perspectives in this evolving field; and provides historical context for critical analyses of African American experiences in the United States, and their engagement with the African diaspora.
130c. History of Rock Music. Spring 2012. Vineet Shende.
Explores how a marginalized and racially segregated genre (the so called "Race Music" of the 1920s) has developed into the world's most dominant popular music tradition. The history of rock music and its descendants (including punk, metal, funk, electronica, and hip-hop) will be explored through changes in five often interrelated filters: race relations, commerce, politics, technology, and, of course, music. (Same as Music 130.)
[136c-IP, VPA. Black Musics in Latin America and the Caribbean. (Same as Latin American Studies 136 and Music 136.)]
[139c. The Civil War Era. (Same as History 139.)]
201c - ESD, VPA. Black Women, Politics, Music, and the Divine. Fall 2011. Judith Casselberry.

Seminar. Examines the convergence of politics and spirituality in the musical work of contemporary Black women singer-songwriters in the United States. Analyzes material that interrogates and articulates the intersections of gender, race, class, and sexuality, generated across a range of religious and spiritual terrains with African diasporic/Black Atlantic spiritual moorings, including Christianity, Islam, and Yoruba. Focuses on material that reveals a womanist (Black feminist) perspective by considering the ways resistant identities shape and are shaped by artistic production. Employs an interdisciplinary approach by incorporating ethnomusicology, anthropology, literature, history, and performance and social theory. Explores the work of Shirley Caesar, The Clark Sisters, Me'shell Ndegeocello, Abby Lincoln, Sweet Honey in the Rock, and Dianne Reeves, among others. (Same as Gender and Women's Studies 207, Music 201, and Religion 201.)
207c - ESD, IP. Francophone Cultures. Every fall. Fall 2011. Isabelle Choquet.
An introduction to the cultures of various French-speaking regions outside of France. Examines the history, politics, customs, cinema, literature, and the arts of the Francophone world, principally Africa and the Caribbean. Conducted in French. (Same as French 207 and Latin American Studies 206.)

Prerequisite: French 205 or higher, or permission of the instructor.
208b. Race and Ethnicity. Spring 2012. Ingrid Nelson.
The social and cultural meaning of race and ethnicity, with emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons among racial and ethnic minorities in the United States. (Same as Sociology 208.)

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

209c - ESD, IP. Introduction to the Study and Criticism of Francophone Literature. Every spring. Hanétha Vété-Congolo.
Introduces students to the literary tradition of the contemporary Francophone world. Focuses
on major authors and literary movements in historical and cultural context. Conducted in French. (Same as French 211 and Latin American Studies 213.)

Prerequisite: French 205 or higher, or permission of the instructor.
213c. Transnational Africa and Globalization. Fall 2011. Olufemi Vaughan.
Seminar. Drawing on key readings on the historical sociology of transnationalism since World War II, examines how postcolonial African migrations transformed African states and their new transnational populations in Western countries. Discusses what concepts such as the nation state, communal identity, global relations, and security mean in the African context to critically explore complex African transnational experiences and globalization. These dynamic African transnational encounters encourage discussions on homeland and diaspora, tradition and modernity, gender and generation. (Same as History 213.)

216c. History of African and African Diasporic Political Thought. Spring 2012. Olufemi Vaughan.
Seminar. Will critically discuss some seminal works in African diaspora and African political thought in the nineteenth and twentieth centuries. Organized around global and national currents that will allow students to explore intersections in pan-African, African American, and African political thought in the context of Atlantic and global histories. Seminar topics are divided into three major historic moments. The first will explore major themes on Atlantic slavery and Western thought, notably slavery and racial representation; slavery and capitalism; slavery and democracy. The second will focus on the struggle of African Americans, Africans, and West Indians for freedom in post-Abolition and colonial contexts. Topics discussed within twentieth-century national, regional, and global currents include reconstruction and industrialization; pan-Africanism; new negro; negritude; colonialism; nationalism. Finally, explores pan-African and African encounters in the context of dominant postcolonial themes, namely decolonization; Cold War; state formation; imperialism; African diaspora feminist thought; globalism. Discusses these foundational texts and the political thoughts of major African, African American, and Caribbean intellectuals and activists in their appropriate historical context. (Same as History 216.)
218c. The African American Experience in Europe. Spring 2012. Tristan Cabello.
Explores the history of African Americans in Europe from World War I to the present. Europe saw the beginnings of an African American community in the aftermath of World War I. Soon after, African American artists found 1920s France ready to embrace them with open arms. Since then, African Americans have formed artistic and professional communities in Europe that remain influential in contemporary discourses. How did African Americans shift European discourses on race? How were African Americans impacted by their European experience? Course materials include sociological, historical, and cultural analyses, media articles, visual texts, and fiction. Topics include the Harlem Renaissance overseas, the Black Patriots, French "Negrophilia," Josephine Baker, Black Montmartre, Europe as gateway to Africa, Blacks in Nazi Germany, Nazi persecution in Paris, African American gays in Paris, "Le Jazz-Hot," the Besatzungskinder (occupation children), James Baldwin, the May 1968 upheavals, race/sexuality, and hip-hop.
221b. Race and Sexuality in Modern America. Spring 2012. Tristan Cabello.
Surveys the history of race and sexuality as important intersecting categories that organize life and politics in the United States since the early twentieth century. Focuses on the development of racial and sexual classifications, and on the ways Americans embraced, resisted, and

## Courses of Instruction

transformed the normative dimensions of those categories. Readings and discussions address the shifting relationship between social norms and marginal or deviant people and communities. Course materials include sociological, historical, and cultural analyses, media articles, visual texts, and fiction. Topics include the politics of respectability in communities of color; definitions of sexual freedom; marital norms; interracial marriage; sexual coercion; HIV/ AIDS; sex and race in American cinema; race and gay communities; and the sexual politics of social movements both left and right. (Same as Gay and Lesbian Studies 221 and Gender and Women's Studies 222.)

## [222b - IP. Politics and Societies in Africa. (Same as Government 222.)]

[227b - IP. Transnational Race and Ethnicity. (Same as Asian Studies 263 and Sociology 227.)]

228c - ESD, VPA. Protest Music. Spring 2012. Judith Casselberry.
Focuses on the ways black people have experienced twentieth-century events. Examines social, economic, and political catalysts for processes of protest music production across gentes including gospel, blues, folk, soul, funk, rock, reggae, and rap. Analysis of musical and extra- musical elements' style, form, production, lyrics, intent, reception, commodification, mass-media, and the Internet. Explores ways in which people experience, identify, and propose solutions to poverty, segregation, oppressive working conditions, incarceration, sexual exploitation, violence, and war. (Same as Anthropology 227 and Music 227.)

230c. Global History of the "Ghetto." Spring 2012. Brian Purnell.
From medieval Venice to contemporary Chicago, from favelas in Brazil, to ghettos in Warsaw, to townships in South Africa, to public housing projects in New York, to the suburbs of Paris-discourses of racial and religious difference have justified concentrations of people in urban spaces and limitations on their social and spatial mobility. They are known commonly as "ghettos." Compares different "ghettos" in various parts of the globe and examines the historical uses of that term to describe people and places.

231b - ESD, IP. A History of the Global AIDS Epidemic. Fall 2011. Tristan Cabello.
Seminar. An interdisciplinary exploration of the political, cultural, and social dimensions that characterize the experience of the HIV/AIDS crisis. Focusing on several geographic locations from the United States, to Haiti, to Europe, to South Africa, considers AIDS as a global pandemic. How did activists address political (in)action? How did cultural representations of AIDS evolve? How, and to what extent, have social constructions about AIDS changed over the last three decades? Course materials include sociological, historical, and cultural analyses, media articles, visual texts, and fiction. Topics include naming AIDS, the making of safe sex, "The Gay Disease," the San Francisco bathhouses, the AIDS business, AIDS in urban Black American communities, HAART (Anti-Retroviral Therapy), Activism and Politics, the Bareback Culture, ACT-UP, AIDS in Africa, Thatcher's AIDS politics, the generic HAART business in India, and the AIDS literary tradition. (Same as Gay and Lesbian Studies 231.)
[233b - ESD, IP. Peoples and Cultures of Africa. (Same as Anthropology 233.)]
[236c - ESD. The History of African Americans, 1619-1865. (Same as History 236.)]
[237c - ESD. The History of African Americans from 1865 to the Present. (Same as History 237.)]

244c - ESD. Martin, Malcolm, and America. Fall 2011. Brian Purnell.
Seminar. Examines the lives and thoughts of Martin L. King Jr. and Malcolm X. Traces the development in their thinking and examines the similarities and differences between them. Evaluates their contribution to the African American freedom struggle, American society, and the world. Emphasizes very close reading of primary and secondary material; use of audio and videocassettes; lecture presentations and class discussions. In addition to being an academic study of these two men's political and religious commitment, also concerns how they inform our own political and social lives. (Same as History 279.)

252c. Empire of Feeling. Spring 2012. Peter Coviello.
A study of the relations between sentiment and belonging across the American nineteenth century. Considers how a language of impassioned feeling promised to consolidate a nation often bitterly divided, and some of the problems with that promise. Centers on a reading of Harriet Beecher Stowe's Uncle Tom's Cabin. Other authors may include Jefferson, Wheatley, Melville, Hawthorne, Wilson, and Du Bois. (Same as English 252 and Gender and Women's Studies 252.)
Prerequisite: One first-year seminar or 100-level course in English, Africana studies, or gender and women's studies.
[260c. African American Fiction: (Re)Writing Black Masculinities. (Same as English 260 and Gender and Women's Studies 260.)]
262c - ESD, IP. Africa and the Atlantic World, 1400-1880. Fall 2011. David Gordon.
A survey of historical developments before conquest by European powers, with a focus on west and central Africa. Explores the political, social, and cultural changes that accompanied the intensification of Atlantic Ocean trade and revolves around a controversy in the study of Africa and the Atlantic World: What influence did Africans have on the making of the Atlantic World, and in what ways did Africans participate in the slave trade? How were African identities shaped by the Atlantic World and by the slave plantations of the Americas? Ends by considering the contradictory effects of Abolition on Africa. (Same as History 262.)
Note: This course fulfills the pre-modern requirement for history majors.
264c - ESD, IP. Conquest, Colonialism, and Independence: Africa since 1880. Spring 2012. David Gordon.

Focuses on conquest, colonialism, and its legacies in sub-Saharan Africa; the violent process of colonial pacification, examined from European and African perspectives; the different ways of consolidating colonial rule and African resistance to colonial rule, from Maji Maji to Mau Mau; and African nationalism and independence, as experienced by Africa's nationalist leaders, from Kwame Nkrumah to Jomo Kenyatta, and their critics. Concludes with the limits of independence, mass disenchantment, the rise of the predatory post-colonial state, genocide in the Great Lakes, and the wars of Central Africa. (Same as History 264.)
[268c - IP. Mogadishu to Madagascar: East African History. (Same as History 265.)]
269c - ESD, IP. After Apartheid: South African History and Historiography. Spring 2012. David Gordon.

Seminar. Investigates the diverse representations and uses of the past in South Africa. Begins with the difficulties in developing a critical and conciliatory version of the past in post-apartheid South Africa during and after the much-discussed Truth and Reconciliation

## Courses of Instruction

Commission. Then turns to diverse historical episodes and sites of memory from the Great Trek to the inauguration of Nelson Mandela to explore issues of identity and memory from the perspectives of South Africa's various peoples. (Same as History 269.)

270c - ESD. African American Fiction: Humor and Resistance. Spring 2012. Elizabeth Muther.

Explores rich traditions of African American humor in fiction, comics, graphic narratives, and film. Considers strategies of cultural survival and liberation, as well as folkloric sources, trickster storytellers, comic double-voicing, and the lampooning of racial ideologies. Close attention paid to modes of burlesque, satirical deformation, caricature, tragicomedy, and parody in historical and contemporary contexts, including such writers and performers as Charles Chesnutt, Bert Williams, Langston Hughes, Zora Neale Hurston, Richard Pryor, Ishmael Reed, Aaron McGruder, Dave Chappelle, and Suzan-Lori Parks. (Same as English 270.)

Prerequisite: One first-year seminar or 100-level course in English or Africana studies.
Note: This course fulfills the literature of the Americas requirement for English majors.
271c - ESD. Spirit Come Down: Black Women and Religion. Spring 2012. Judith Casselberry.

Explores issues of self-representation, memory, material culture, embodiment, and civic and political engagement through autobiographical, historical, literary, anthropological, cinematic, and musical texts. Primarily focused on Christian denominations: Methodist, Baptist, and Pentecostal. Examines the religious lives of black women in nineteenth- and twentieth-century America. (Same as Gender and Women's Studies 270 and Religion 271.)

## 272c - IP. Warlords and Child Soldiers in African History. Fall 2011. David Gordon.

Seminar. Examines how gender, age, religion, and race have informed ideologies of violence by considering various historical incarnations of the African warrior across time, including the hunter, the military slave, the revolutionary, the mercenary, the soldier, the warlord, the holy warrior, and the child soldier. Focuses on how fighters, followers, African civilians, and the international community have imagined the "work of war" in Africa. Readings include scholarly analyses of warfare, warriors, and warrior ideals alongside memoirs and fictional representations. (Same as History 272.)
[274c. Atlantic Antislavery. (Same as History 270.)]
[276c - ESD. Queer Race. (Same as English 276 and Gay and Lesbian Studies 276.)]
280b - ESD. Race, Biology, and Anthropology. Spring 2012. Scott MacEachern.
Critically examines the biological justifications used to partition humanity into racial groups. Investigates the nature of biological and genetic variability within and between human populations, as well as the characteristics of human biological races as they have traditionally been defined. Considers whether race models do a good job of describing how human populations vary across the earth. Critically appraises works by a variety of authors, including Phillippe Rushton, Charles Murray, and Michael Levin, who claim that racial identity and evolution work together to structure the history and the potentials of human groups in different parts of the world. (Same as Anthropology 280.)

Prerequisite: Anthropology 101 or 102, or Sociology 101, or permission of the instructor.

291-294. Intermediate Independent Study in Africana Studies. The Program.
301c. Senior Seminar in Africana Studies. Spring 2012. Brian Purnell.
Students conduct intensive research on a major topic in Africana studies that they have explored during the course of their academic experience in the Africana Studies Program. Students required to apply rigorous humanities and social science theories and concepts to African American, African, or African diaspora themes in the formation of their final research projects. Students required to give regular presentations of their research projects to Africana studies faculty and students.

Prerequisite: Africana Studies 101 and one 200-level course in Africana studies.
315. Contemporary African American Film. Spring 2012. Elizabeth Muther. Explores a spectrum of recent films about African American culture and history. Topics may include the documentary impulse in contemporary African American film; gender, sexuality, and cultural images; the politics of interpretation-writers, filmmakers, critics, and audiences; the urban context and the economics of alienation. One-half credit course. (Same as English 315.)

Prerequisite: One 200-level course in English or Africana studies; or permission of the instructor.

319c. James Baldwin. Spring 2012. Guy Mark Foster.
Examines the major postwar writings of the controversial African American author and the role his fiction and nonfiction played in challenging that era's static understandings of racial, gender, and sexual politics. Although Baldwin lived abroad for much of his life, many critics associate the author narrowly with the U.S. black civil rights and sexual liberation struggles. In recent years, however, Baldwin has increasingly been recognized as a transnational figure and for his invaluable contributions to the discourse of globalization. Indeed, Baldwin's "geographical imagination," one informed by critical racial literacy, led him to anticipate many of the central insights of contemporary Queer Studies, Whiteness Studies, as well as Africana philosophical thought. (Same as English 319 and Gay and Lesbian Studies 319.)

Prerequisite: One 200 -level course in English, Africana studies, or gay and lesbian studies; or permission of the instructor.
320c. Beyond the Postcard: The Hispanic Caribbean. Fall 2011. Nadia Celis.
Explores the historical trends that have shaped Hispanic Caribbean societies through a panoramic study of twentieth-century fiction, film, and popular music by authors from the Greater Caribbean and U.S.-Latinos of Caribbean descent. Topics include colonialism, slavery and the plantation economy, imperialism, dictatorships, tourism, migrations, and collective identities. Authors include García Márquez, Santos-Febres, Barnet, Piñera, and Junot Díaz. (Same as Latin American Studies 320 and Spanish 320.)

Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.
[336c. Research in Nineteenth-Century United States History. (Same as History 336.)]
401-404. Advanced Independent Study and Honors in Africana Studies. The Program.

## Arabic

Lecturer: Russell J. Hopley

## 101c. Elementary Arabic I. Fall 2011. Russell Hopley.

An introductory course that presumes no previous knowledge of Arabic. Students begin to acquire an integrated command of speaking, reading, writing, and listening skills in Modern Standard Arabic. Some exposure to Egyptian Colloquial Arabic as well. Class sessions conducted primarily in Arabic. Formerly Interdisciplinary Studies 101.

102c. Elementary Arabic II. Spring 2012. Russell Hopley.
A continuation of Elementary Arabic I, focuses on further developing students' skills in speaking, listening, comprehending, writing, and reading Modern Standard Arabic. Formerly Interdisciplinary Studies 102.
Prerequisite: Arabic 101 [formerly Interdisciplinary Studies 101].
203c. Intermediate Arabic I. Fall 2011. Russell Hopley.
A continuation of first-year Arabic, aiming to enhance proficiency in listening, speaking, reading, and writing through the study of more elaborate grammar structures and exposure to more sophisticated, authentic texts. Formerly Interdisciplinary Studies 203.

Prerequisite: Arabic 102 [formerly Interdisciplinary Studies 102].
204c. Intermediate Arabic II. Spring 2012. Russell Hopley.
A continuation of Intermediate Arabic I, provides students with a more in-depth understanding of Modern Standard Arabic. Aims to enhance proficiency in speaking, listening, reading, and writing through the study of more elaborate grammatical structures and sophisticated, authentic texts. Textbook material supplemented by readings from the Qur'an, the hadith, and early Arabic poetry.

Prerequisite: Arabic 203 [formerly Interdisciplinary Studies 203].
291c-294c. Intermediate Independent Study in Arabic.

## Art

Stephen Perkinson, Director, Art History Division
Mark C. Wethli, Department Chair and Director, Visual Arts Division
Elizabeth H. Palmer, Department Coordinator

Professor: Mark C. Wethli<br>Associate Professors: Linda J. Docherty, Pamela M. Fletcher, Michael Kolstert, James Mullen, Stephen Perkinson, Susan E. Wegner<br>Assistant Professors: Alicia Eggert, De-nin Deanna Lee (Asian Studies), Carrie Scanga<br>Lecturers: John B. Bisbee, Natasha Goldman<br>Visiting Faculty: Meggan Gould

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.

## Requirements for the Major in Art History

The art history major consists of ten courses, excluding first-year seminars. Required are Art History 100; one course in African, Asian, or pre-Columbian art history numbered 103 or higher; one from Art History 209 (same as Archeology 101), 210 (same as Archeology 102), 213, 214, 215, or 226; one from Art History 216, 222, 223, 224, or 232; one from Art History 242, 252, 254, 262, or 264; one additional 200-level course; two 300 -level seminars; and two additional art history courses numbered higher than 101, 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. See page 197.

## Requirements for the Minor in Art History

The minor consists of five courses, excluding first-year seminars. Required courses are Art History 100; two 200 -level courses; one 300 -level course; and one additional art history course numbered higher than 100.

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

The major and the minor in visual arts are described on page 53.

## Courses in the History of Art

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
11c. Visual Strategies of Holocaust Remembrance. Fall 2011. Natasha Goldman.

## Introductory, Intermediate, and Advanced Courses

100c. Introduction to Art History. Fall 2011. Pamela Fletcher, Stephen Perkinson, and Susan Wegner.

An introduction to the study of art history. Provides a chronological overview of art primarily from Western and East Asian traditions. Considers the historical context of art and its production, the role of the arts in society, problems of stylistic tradition and innovation, and points of contact and exchange between artistic traditions. Equivalent of Art History 101 as a major or minor requirement. Not open to students who have credit for Art History 101.
[130c - IP. Introduction to the Arts of Ancient Mexico and Peru. (Same as Latin American Studies 130.)]
209c. Introduction to Greek Art and Archaeology. Fall 2011. Jorge Bravo.
Introduces the techniques and methods of classical archaeology as revealed through an examination of Greek material culture. Emphasis upon the major monuments and artifacts of the Greek world from prehistory to the Hellenistic age. Architecture, sculpture, fresco painting,

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and other "minor arts" are examined at such sites as Knossos, Mycenae, Athens, Delphi, and Olympia. Considers the nature of this archaeological evidence and the relationship of classical archaeology to other disciplines such as art history, history, and classics. Assigned reading supplements illustrated presentations of the major archaeological finds of the Greek world. (Same as Archaeology 101.)

## 210c. Introduction to Roman Archaeology. Fall 2012. Jorge Bravo.

Surveys the material culture of Roman society, from Italy's prehistory and the origins of the Roman state through its development into a cosmopolitan empire, and concludes with the fundamental reorganization during the late third and early fourth centuries of our era. Lectures explore ancient sites such as Rome, Pompeii, Athens, Ephesus, and others around the Mediterranean. Emphasis upon the major monuments and artifacts of the Roman era: architecture, sculpture, fresco painting, and other "minor arts." Considers the nature of this archaeological evidence and the relationship of classical archaeology to other disciplines such as art history, history, and classics. Assigned reading supplements illustrated presentations of the major archaeological finds of the Roman world. (Same as Archaeology 102.)
213 c - VPA. Art of Three Faiths: Christian, Jewish, and Islamic Art and Architecture, from the Third to the Twelfth Century. Fall 2011. Stephen Perkinson.
Examines ways images, objects, and buildings shaped the experiences and expressed the beliefs of members of three major religious traditions (Christianity, Judaism, and Islam) in Europe and the Mediterranean region. Deals with artworks spanning the third century through the twelfth century from Europe, the Middle East, North Africa, and the Byzantine Empire. Includes thematic sessions, dealing with issues that cut across geographic and chronological boundaries. Topics include the embrace or rejection of a classical artistic heritage; the sponsorship of religious art by powerful figures; the use of images and architecture to define community and to reject those defined as outsiders; forms of iconoclasm and criticism of the use of images among the three religions; theological justifications for the use of images; and the role of images in efforts to convert or conquer members of another faith.

Prerequisite: Art History 100 or 101, or permission of the instructor.
214c - VPA. The Gothic World. Spring 2012. Stephen Perkinson.
Introduces students to art produced in Europe and the Mediterranean from the twelfth though the early fifteenth centuries. Following a general chronological sequence, investigates the key artistic monuments of this period in a variety of media, including architecture, painting, manuscript illumination, stained glass, sculpture, and the decorative arts. Explores a particular theme in each class meeting through the close analysis of a single monument or closely related set of monuments addressed in class, as well as those that they may encounter in their future studies.

Prerequisite: Art History 100 or 101, or permission of the instructor.

## [215c. Illuminated Manuscripts and Early Printed Books.]

## 222c - VPA. The Art of Renaissance Italy. Spring 2012. Susan Wegner.

A survey of the painting, sculpture, and architecture of Italy in the fourteenth, fifteenth, and sixteenth centuries, with emphasis on major masters: Giotto, Masaccio, Donatello, Brunelleschi, Alberti, Botticelli, Leonardo da Vinci, Raphael, Titian, and Michaelangelo.
Prerequisite: Art History $\mathbf{1 0 0}$ or 101, or permission of the instructor.

224 c - VPA. Mannerism. Spring 2012. Susan Wegner.
Mannerism in art and literature. Artists in Michaelangelo, Pontormo, Rosso, Bronzino, El Greco. Themes include fantasy and imagination, ideal beauty (male and female), the erotic and grotesque, and the challenging of High Renaissance values. Readings include artists' biographies, scientific writings on the senses, formulas for ideal beauty, and description of court life and manners. Uses the Bowdoin College Museum of Art's collection of sixteenth century drawings, prints, and medals.
[226c - VPA. Northern European Art of the Fifteenth and Sixteenth Centuries.]
[232c. Art in the Age of Velázquez, Rembrandt, and Caravaggio.]
[242c. Nineteenth-Century European Art.]
243c - VPA. Modern Architecture: 1750 to 2000. Spring 2013. Jill Pearlman.
Examines major buildings, architects, architectural theories, and debates during the modern period, with a strong emphasis on Europe through 1900, and both the United States and Europe in the twentieth century. Central issues of concern include architecture as an important carrier of historical, social, and political meaning; changing ideas of history and progress in built form; and the varied architectural responses to industrialization. Attempts to develop students' visual acuity and ability to interpret architectural form while exploring these and other issues. (Same as Environmental Studies 243.)

252c. Modern Art. Spring 2012. Pamela Fletcher.
A study of the modernist movement in visual art in Europe and the Americas, beginning with post-impressionism and examining, in succession: expressionism fauvis, cubism, futurism, constructivism, Dada, surrealism, the American affinities of these movements, and the Mexican muralists. Modernism is analyzed in terms of the problems presented by its social situation; its relation to other elements of culture; its place in the historical tradition of Western art; and its invocation of archaic, primitive, and Asian cultures.

Prerequisite: Art History 100 or 101, or permission of the instructor.

## [254c. Contemporary Art.]

261c. Private Treasures, Public Gifts: Art Collecting in America. Fall 2011. Linda Docherty.

An examination of art collecting in America from the late eighteenth century to the present day. Looks at different types of collectors, the objects that they favored, and their contributions to the history of American museums. Focuses on the value they placed on art as a means of educating a democracy, cultivating taste, acquiring social status, providing aesthetic pleasure, instilling national pride, and effecting social change. Includes a student-curated exhibition on recent acquisitions, to be mounted in conjunction with the Bowdoin College Museum of Art's bicentennial celebration of James Bowdoin III's original bequest. Provides experience in museum research, writing, installation, and programming, and demonstrates how gifts of art from private collectors enrich the educational offerings of the College.
Prerequisite: Art History $\mathbf{1 0 0}$ or 101, and one art history class numbered $\mathbf{2 0 1}$ or above; or two art history classes numbered 201 or above; or permission of the instructor.

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262c. American Art I: Colonial Period to the Civil War. Spring 2012. Linda Docherty.
A survey of American architecture, sculpture, painting, and decorative arts from their colonial origins through their development into a distinctive national tradition. Emphasis is placed on understanding American art in its historical context. Methods of art historical interpretation analyzed and discussed using primary and secondary source readings. Studies original objects in the Bowdoin College Museum of Art and buildings on the Bowdoin campus and its environs.
264c. American Art from the Civil War to 1945. Fall 2011. Linda Docherty.
A survey of American architecture, sculpture, and painting between the Civil War and World War II. Issues to be considered include the expatriation of American painters after the Civil War, the introduction of European modernism to the United States, the pioneering achievements of American architects and photographers, the increasing participation of women and minorities in the fine arts, and the ongoing tension between native and cosmopolitan forms of cultural expression.

291c-294c. Intermediate Independent Study in Art History. Art History Faculty.

## 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 in each semester. As the seminars are varied, a given topic may be offered only once, or its form changed considerably from time to time.
[315c. Art at the Late Medieval Courts.]
[324c. Art and Life of Michelangelo.]
[332c. Painting and Society in Spain: El Greco to Goya.]
333c. Studies in Seventeenth-Century Art: Caravaggio and Artemisia Gentileschi. Fall 2011. Susan Wegner.

Contrasts two artists-one male, one female-whose powerful, naturalistic styles transformed European painting in the seventeenth century. Starting with a close examination of the artists' biographies (in translation), focuses on questions of the artists' education, artistic theory, style as a reflection of character, and myths and legends of the artists' lives. Also examines the meanings of seventeenth-century images of heroic women, such as Esther, Judith, and Lucretia, in light of social and cultural attitudes of the times.

Prerequisite: Art History 100 or 101, or permission of the instructor.
[357c. The Commercial Art Gallery.]
[358c. Modern Art in Great Britain: Pre-Raphaelitism to Vorticism.]
[361c. The World of Isabella Stewart Gardner.]
[362c. History and Memory.]
364c. Americans Abroad. Spring 2012. Linda Docherty.
A study of the impact of foreign experience on American artists and the resulting contributions they made to the larger world of art. Considers practices of going abroad for training, working together in colonies, traveling in search of history and/or scenery, and expatriating from one's native land. Focuses on American artists in England, France, Italy, and the Middle East from the
mid-eighteenth to mid-twentieth centuries. Issues addressed include the desire for international recognition, the limits and freedoms of being an outsider, the perceived threat to national identity, and the quest for alternative modes of living and making art.

Prerequisite: One of the following: Art History 100, 101, 262, or 264.
401c-404c. Advanced Independent Study and Honors in Art History. Art History Faculty.

## Visual Arts

## Requirements for the Major in Visual Arts

The major consists of eleven courses, which must include Visual Arts 150; either 180, 190, or 195; and both 390 and 395 . Five additional visual arts courses must be taken, 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 150 and either 180, 190, or 195. 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 on a graded basis (not Credit/D/Fail), and students must earn grades of C- or better in these courses.

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

150c - VPA. Drawing I. Fall 2011. Carrie Scanga and Mark Wethli. Spring 2012. James Mullen, Carrie Scanga, and Mark Wethli.
An introduction to drawing, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects entail objective observation and analysis of still-life, landscape, and figurative subjects; exploration of the abstract formal organization of graphic expression; and the development of a critical vocabulary of visual principles. Lectures and group critiques augment studio projects in various drawing media.
160c. Painting I. Fall 2011. James Mullen. Spring 2012. James Mullen.
An introduction to painting, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects entail objective observation and analysis of still-life, landscape, and figurative subjects; exploration of the painting medium and chromatic structure in representation; and the development of a critical vocabulary of painting concepts. Lectures and group critiques augment studio projects in painting media.
Prerequisite: Visual Arts 150.

## 170c - VPA. Printmaking I. Fall 2011. Carrie Scanga.

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

180c - VPA. Photography I. Fall 2011. Meggan Gould. Spring 2012. The Department.
Photographic visualization and composition as consequences of fundamental techniques of black-and-white still photography. Class discussions and demonstrations, examination of

## Courses of Instruction

masterworks, and field and laboratory work in 35 mm format. Students must provide their own 35 mm non-automatic camera.

190c - VPA. Architectural Form and Space. Fall 2011 and Spring 2012. Alicia Eggert.
An introduction to architectural form and space. Studio projects investigate the built environment through site analysis, drawing, and three-dimensional design. Assigned readings and class discussions develop a vocabulary of architectural design principles. Studio projects and presentation methods are analyzed in lectures and group critiques.

195c - VPA. Sculpture I. Fall 2011. John Bisbee.
An introduction to sculpture, with emphasis on the development of perceptual, organizational, and critical abilities. Studio projects entail a variety of sculptural approaches, including exploration of the structural principles, formal elements, and critical vocabulary of the sculpture medium. Lectures and group critiques augment studio projects in paper, clay, and other media.

250c. Drawing II. Fall 2011. Mark Wethli.
A continuation of the principles introduced in Visual Arts 150, with particular emphasis on figurative drawing. Studio projects develop perceptual, creative, and critical abilities through problems involving objective observation, gestural expression and structural principles of the human form, studies from historical and contemporaty examples, and exploration of the abstract formal elements of drawing. Lectures and group critiques augment studio projects in various drawing media.

Prerequisite: Visual Arts 150.
255. 3-D Digital Animation Studio. Fall 2011 and 2012. Carey Phillips.

Explores the uses of art and three-dimensional animations in communicating complex dynamic and spatial relationships, primarily as they pertain to explaining scientific concepts. Students use primary literature to explore a science problem in a seminar-type format. Study of filmmaking and use of high-end three-dimensional animation software. Concludes with a team effort to create a three-dimensional animated film of the science problem. (Same as Biology 202.)

## [262c. Portraiture and the Politics of Identity.]

270c. Printmaking II. Spring 2012. Carrie Scanga.
A continuation of the principles introduced in Visual Arts 170, with particular emphasis on independent projects.

Prerequisite: Visual Arts 170 or permission of the instructor.
272c. Landscape Painting. Fall 2011. James Mullen.
A continuation of principles introduced in Visual Arts 160, with an emphasis on landscape painting. Studio projects investigate various relationships to nature through painting at a variety of sites and through the changing seasons of the coastal landscape. Painting activity is augmented with readings and presentations to offer a historical perspective on different languages, approaches, and philosophies in relation to the pictorial interpretation of landscape experience.

Prerequisite: Visual Arts 160 or permission of the instructor.
[281c. Digital Color Photography.]

282c - VPA. Photography and Color. Fall 2011. Meggan Gould.
A continuation of principles encountered in Visual Arts 180, with an added emphasis on the expressive potential of color. Cameras of various formats, from the 35 mm to the $4 \times 5$, are used to complete assignments. Approaches to color film exposure and digital capture, manipulation, and printing are practiced and the affect of color is examined. Through reading assignments, slide presentations, and discussions, students explore historical and cultural implications of color photography. Weekly assignments and group critiques structure class discussion.

Prerequisite: Visual Arts 180.
283c. Art and Time. Spring 2012. Alicia Eggert.
An exploration of the role of time in the visual arts. Through class assignments and independent projects, examines how artists can invoke and transform time. Attention given to historical and contemporary precedents. Seminar discussions, field trips, and class critiques.

## Prerequisite: Visual Arts 180.

285c. Sculpture II. Fall 2011. John Bisbee.
A continuation of principles introduced in Visual Arts 195, with particular emphasis on independent projects.

Prerequisite: Visual Arts 195 or permission of the instructor.
[286c - VPA. Make. Believe. Sculpture.]
295c-299c. Intermediate Independent Study in Visual Arts. Visual Arts Faculty.
380c. Photo Seminar. Spring 2012. Meggan Gould.
An extension of principles and techniques developed in Visual Arts 180 and Visual Arts 280, with increased emphasis on independent projects. Seminar discussion and critiques, and field and laboratory work. Participants must provide their own non-automatic 35 mm camera.

Prerequisite: Visual Arts $\mathbf{2 8 0}$ or $\mathbf{2 8 1}$ or permission of the instructor.
390c. Senior Seminar. Every fall. Fall 2011. Alicia Eggert.
Concentrates on strengthening critical and formal skills as students start developing an individual body of work. Includes readings, discussions, individual and group critiques, as well as visiting artists.

395c. Senior Studio. Every spring. Spring 2012. Meggan Gould.
A continuation of the Senior Seminar, with emphasis on the creation of an individual body of work. Includes periodic reviews by members of the department and culminates with a group exhibition at the conclusion of the semester.

## Prerequisite: Visual Arts 390.

401c. Advanced Independent Study and Honors in Visual Arts. Visual Arts Faculty.
Open only to exceptionally qualified senior majors and required for honors credit. Advanced projects undertaken on an independent basis, with assigned readings, critical discussions, and a final position paper.

# Asian Studies 

Henty C. W. Laurence, Program Director<br>Suzanne M. Astolfi, Program Coordinator

Professors: 'Thomas D. Conlan $\dagger$ (History), John C. Holt (Religion)<br>Associate Professors: Songren Cui, Henry C. W. Laurence (Government), Rachel Sturman (History), Shu-chin Tsui<br>Assistant Professors: Belinda Kong (English), De-nin Deanna Lee (Art History), Vyjayanthi<br>Ratnam Selinger**<br>Instructor: Christopher Heurlin (Government)<br>Lecturers: Sree Padma Holt, Naho Maruta, Mitsuko Numata, Yuxia Xiu<br>Contributing Faculty: David Collings, Sara A. Dickey, Dhiraj Murthyt, Nancy 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 ( 300 level) 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 300 level. 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 Asian Studies 246 or 283 (same
as History 283); and those focusing on South Asia must take one 200 -level course from each of the following three areas: anthropology, history, and religion, all of which must have South Asia as their primary focus (whenever possible, two of those courses should be Asian Studies 232 [same as Anthropology 243], 240 [same as Religion 220], or 256 [same as History 261]).

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 a 300 -level course 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 200 -level course from each of the following three areas: anthropology, history, and religion, all of which must have South Asia as their primary focus (whenever possible, two of those courses should be Asian Studies 232 [same as Anthropology 243], 240 [same as Religion 220], or 256 [same as History 261]). 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 300 level. No "double counting" of courses is allowed for the minor. First-year seminars do count for 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 they may select another program based upon their academic interests. The ISLE and SITA programs are recommended for students interested in South Asia. Consult the Asian studies office or website 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 established records of A or B+ average 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.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
[11c. Living in the Sixteenth Century. (Same as History 13.)]
15c. Orphans of Asia. Fall 2011. Belinda Kong. (Same as English 15.)
19b. East Asian Politics: Introductory Seminar. Fall 2011. Henry C. W. Laurence. (Same as Government 19.)

21c. Perspectives on Modern China. Fall 2011. Shu-chin Tsui.
[26c. Globalizing India. (Same as History 26.)]

## Introductory, Intermediate, and Advanced Courses

201c - ESD, IP. Literature of World War II and the Atomic Bomb in Japan: History, Memory, and Empire. Spring 2013. Vyjayanthi Selinger.

A study of Japan's coming to terms with its imperialist past. Literary representations of Japan's war in East Asia are particularly interesting because of the curious mixture of remembering and forgetting that mark its pages. Postwar fiction delves deep into what it meant for the Japanese people to fight a losing war, to be bombed by a nuclear weapon, to face surrender, and to experience Occupation. Sheds light on the pacifist discourse that emerges in atomic bomb literature and the simultaneous critique directed towards the emperor system and wartime military leadership. Also examines what is missing in these narratives-Japan's history of colonialism and sexual slavery-by analyzing writings from the colonies (China, Korea, and Taiwan). Tackles the highly political nature of remembering in Japan. Writers include the Nobel prize-winning author Ôe Kenzaburô, Ôoka Shôhei, Kojima Nobuo, Shimao Toshio, Hayashi Kyoko, and East Asian literati like Yu Dafu, Lu Heruo, Ding Ling, and Wu Zhou Liu.
[212c - ESD, IP. Writing China from Afar. (Same as English 273.)]
213c - ESD. Introduction to Asian American Literature. Fall 2011. Belinda Kong.
An introduction not only to the writings of Asian America, but also to the historical development of Asian American literature as a field of discussion, study, and debate. Begins by focusing on a seminal moment in the formation of this field: the critical controversy sparked by the publication of Maxine Hong Kingston's The Woman Warrior (1976). Then turns to earlier classics as well as more recent fiction and questions of how to reconceive Asian American literature in light of these works. In addition to Kingston, authors may include Amy Tan, David Henry Hwang, Frank Chin, John Okada, Jade Snow Wong, Carlos Bulosan, Chang-rae Lee, Jhumpa Lahiri, Susan Choi, Lan Cao, and Iê thi diem thúy. (Same as English 271.)

Prerequisite: One first-year seminar or 100 -level course in English, or one course in Asian studies.

Note: This course fulfills the literature of the Americas requirement for English majors.
[216c - ESD, IP. Asian Diaspora Literature of World War II. (Same as English 274.)]

## 217c - ESD, IP. Forbidden Capital: Contemporary Chinese and Chinese Diaspora

 Fiction. Spring 2012. Belinda Kong."To get rich is glorious!"-so goes the slogan popularly attributed to Deng Xiaoping, who ushered 1980s China into an era of economic liberalization. Examines post-Tiananmen fiction from Mainland China as well as the diaspora that responds to, struggles with, and/ or satirizes the paradoxes of socialist capitalism. Critical issues include representations of the Communist Party and the intertwined tropes of corruption and consumption, and sometimes cannibalism; debates on the democratizing promise of capital, with attention to the resurgence of nationalism and the geopolitics of the Beijing Olympics; and the new
identities made possible but also problematic by this era's massive transformations of social life, along the axes of sexuality, gender, and class. (Same as English 286.)

Prerequisite: One first-year seminar or 100-level course in English or Asian studies.
219c. Religion and Fiction in Modern South Asia. Spring 2013. John Holt.
A study of the Hindu and Buddhist religious cultures of modern South Asia as they have been imagined, represented, interpreted, and critiqued in the literary works of contemporary and modern South Asian writers of fiction and historical novels. (Same as Religion 219.)

223c - IP. Mahayana Buddhism. Spring 2012. John Holt.
Studies the emergence of Mahayana Buddhist worldviews as reflected in primary sources of Indian, Chinese, and Japanese origins. Buddhist texts include the Buddhacarita ("Life of Buddha"), the Sukbavati Vyuba ("Discourse on the 'Pure Land"), the Vajraccedika Sutra (the "Diamond-Cutter"), the Prajnaparamitra-hrdaya Sutra ("Heart Sutra of the Perfection of Wisdom"), the Saddharmapundarika Sutra (the "Lotus Sutra"), and the Platform Sutra of the Sixth Patriarch, among others. (Same as Religion 223.)
224c - ESD, IP. Asian America's Aging. Spring 2012. Belinda Kong.
Asian American literature is dominated by voices of youth: the child narrator and the bildungsroman genre have long been used by writers to tell not only personal coming-of-age stories but also that of Asian America itself, as a relative newcomer into the American nation-state and its cultural landscape. Focuses instead on the latecoming figure of the aged narrator in recent Asian American fiction, who constellates themes of dislocation and reclamation, memory, and the body rather than those of maturation and heritage. Explores old age as a vehicle for engaging contemporary issues of globalization and diaspora; historical trauma and cultural memory; life and biopolitics. Examines these works within the paradigm of transnational Asian America, which goes beyond the United States as geographical frame to shed light on the new diasporic identities and cultural politics emerging from twentieth-century global transits. (Same as English 279.)

Prerequisite: One first-year seminar or 100 -level course in English or Asian studies.
Note: This course fulfills the literature of the Americas requirement for English majors.
[226c - ESD, IP. Religion and Political Violence in South Asia. (Same as Religion 225.)]
227b - IP. Contemporary Chinese Politics. Fall 2011. Christopher Heurlin.
Examines Chinese politics in the context of a prolonged revolution. After a survey of the political system as established in the 1950s and patterns of politics emerging from it, the analytic focus turns to political change in the reform era (since 1979) and the forces driving it. Topics include the political impact of decentralization and marketization, the reintegration into the capitalist world economy, and the development of the legal system. The adaptation by the Communist Party to these changes and the prospects of democratization are also examined. (Same as Government 227.)

230c - ESD, IP. Imperialism, Nationalism, Human Rights. Spring 2012. Rachel Sturman.
Examines the history of modern global imperialism and colonialism from the sixteenth through the twentieth centuries. Focuses on the parallel emergence of European nationalism, imperialism, and ideas of universal humanity, on the historical development of anti-colonial nationalisms in the regions ruled by European empires, and on the often-contentious nature of demands for human rights. Emphasis on the history of South Asia, with significant attention to Latin America and Africa. (Same as History 280.)

## Courses of Instruction

231b - IP. Topics on Asian Economies. Spring 2012. Yao Tang.
A study of the similarities and differences in growth experience and the level of economic output per person in Asian countries. Explores possible causes of differences in economic paths, with a focus on several important economies, including China and Japan. Also discusses the relationship between the Asian economies and the United States economy. (Same as Economics 239.)

Prerequisite: Economics 101 and 102.
[232b. Modernity in South Asia. (Same as Anthropology 243.)]
[233b - IP. South Asian Popular Culture. (Same as Sociology 236.)]
236c - ESD, IP. India and the Indian Ocean World. Fall 2011. Rachel Sturman.
Explores the vibrant social world created by movements of people, commodities, and ideas across the contemporary regions of the Middle East, East Africa, South and Southeast Asia from the early spread of Islam through the eighteenth century, with a focus on early modern India. Key topics include pre-modern trade and material cultures, religious conversion, and the development of systems of knowledge in the era before the rise of European colonialism. (Same as History 282.)

Note: This course fulfills the pre-modern requirement for history majors.
[237c - ESD, IP. Sex and the Politics of the Body in India. (Same as Gender and Women's Studies 259 and History 259.)]
239c - ESD, IP. From Gandhi to the Taliban: Secularism and Its Critics in Modern South Asia. Fall 2011. Rachel Sturman.

Seminar. Explores modern sociopolitical movements in India and Pakistan that have sought to redefine the relationship between religion and the state. Issues considered include the meanings of secularism, the ethical claims of modern states, the development of violence and nonviolence as political programs, and the historical impacts of these diverse movements. (Same as History 241.)

Prerequisite: One course in history or permission of the instructor.
240c - IP. Hindu Literatures. Fall 2012. John Holt.
A reading of various genres of translated Hindu religious literature, including Rig Veda hymns, philosophical Upanishads, Yoga Sutras, the epics Ramayana and Mahabharata, including the Bhagavad Gita, selected myths from the Puranas, and poetry and songs of medieval devotional saints. Focuses on development of various types of religious worldviews and religious experiences within Hindu traditions, as reflected in classical Sanskrit and vernacular literature of India. (Same as Religion 220.)

241c - IP. Hindu Cultures. Spring 2013. John Holt.
A consideration of various types of individual and communal religious practice and religious expression in Hindu tradition, including ancient ritual sacrifice, mysticism and yoga (meditation), dharma and karma (ethical and political significance), pilgrimage (as inward spiritual journey and outward ritual behavior), puja (worship of deities through seeing, hearing, chanting), rites of passage (birth, adolescence, marriage, and death), etc. Focuses on the nature of symbolic expression and behavior as these can be understood from indigenous theories of religious practice. Religion 220 is recommended as a previous course. (Same as Religion 221.)

242c - ESD, IP. Theravada Buddhism. Fall 2011. John Holt.
An examination of the major trajectories of Buddhist religious thought and practice as understood from a reading of primary and secondary texts drawn from the Theravada traditions of India, Sri Lanka, Thailand, and Burma. (Same as Religion 222.)

244c - IP. Modern Japanese Literature. Fall 2011. Vyjayanthi Selinger.
As a latecomer to industrial modernity, Japan underwent rapid changes in the early part of the twentieth century. Examines how the creative minds of this period responded to the debates surrounding these sweeping technological and social changes, pondering, among other things, the place of the West in modern Japan, the changing status of women, and the place of minorities. Many of the writers from this period chose to write "I-novels" or first-person fiction. How is the inward turn in narrative tied to modern ideas of the self and its relationship to society? What sorts of quests does this self embark on and how is the end of the journey conceptualized? How do the romantic objects of this (male) self help express notions of stability/instability in a changing world? No prior knowledge of Japanese language, history, or culture is required. All readings in English.

246c - IP. The Fantastic and Demonic in Japanese Literature. Fall 2012. Vyjayanthi Selinger.

From possessing spirits and serpentine creatures to hungry ghosts and spectral visions, Japanese literary history is alive with supernatural beings. The focus of study ranges from the earliest times to modernity, examining these motifs in both historical and theoretical contexts. Readings pose the following broad questions: How do representations of the supernatural function in both creation myths of the ancient past and the rational narratives of the modern nation? What is the relationship between liminal beings and a society's notion of purity? How may we understand the uncanny return of dead spirits in medieval Japanese drama? How does the construction of demonic female sexuality vary between medieval and modern Japan? Draws on various genres of representation, from legends and novels to drama, paintings, and cinema. Students develop an appreciation of the hold that creatures from the "other" side maintain over our cultural and social imagination.
[247b - ESD, IP. Indian Cinema and Society: Industries, Politics, and Audiences. (Same as Anthropology 232.)]

252c - IP. Cultural Topics in Contemporary China. Spring 2012. Shu-chin Tsui.
Explores cultural trends in contemporary China with post-socialist condition as the contextual setting and cultural studies the theoretical framework. Discussion topics include rural-urban transformations, experimental art, alternative literature, documentary cinema, fashion codes, and gender issues. Examines how cultural trends reflect and react to China's social-economic transitions, and how the state apparatus and the people participate in cultural production and consumption.

254c - IP, VPA. Transnational Chinese Cinema. Fall 2012. Shu-chin Tsui.
Introduces students to films produced in the People's Republic of China, Taiwan, and Hong Kong. Places national cinema in a transnational framework and explores how cinema as a sign system constructs sociocultural and aesthetic meanings. Students will benefit most by bringing both an open mind toward non-Western cultural texts, and a critical eye for visual art. (Same as Film Studies 254.)
[256c - ESD, IP. The Making of Modern India. (Same as History 261.)]

## Courses of Instruction

[258c - ESD, IP. Politics and Popular Culture in Twentieth-Century India. (Same as History 263.)]
[263b - IP. Transnational Race and Ethnicity. (Same as Africana Studies 227 and Sociology 227.)]

265b. United States-China Relations. Spring 2012. Christopher Heurlin.
Examines the development of United States relations with China. Begins with a brief historical examination of the Opium War, then examines United States policy towards the Nationalists and the Communists during the Chinese Civil War. In the aftermath of the civil war and subsequent revolution, the role of China in the Cold War discussed. Then focuses on more contemporary issues in United States-China relations, drawing links between the domestic politics of both countries and how they influence the formulation of foreign policy. Contemporary issues addressed include human rights, trade, the Taiwanese independence movement, Tibet, nationalism, and China's growing economic influence in the world. (Same as Government 272.)

266c - IP. Chinese Women in Fiction and Film. Spring 2013. Shu-chin Tsui.
Approaches the subject of women and writing in twentieth- and early twenty-first-century China from perspectives of gender studies, literary analysis, and visual representations. Considers women writers, filmmakers, and their works in the context of China's socialpolitical history as well as its literary and visual traditions. Focuses on how women writers and directors negotiate gender identity against social-cultural norms. Also constructs a dialogue between Chinese women's works and Western feminist assumptions. (Same as Gender and Women's Studies 266.)
[269 - MCSR. Applied Research Practicum: Chinese Rural to Urban Migration. (Same as Economics 277 and Gender and Women's Studies 277.)]
[275c - ESD, IP. The Making of Modern China: 1550 to Present. (Same as History 275.)]
[276c - ESD, IP. China's Origins and Transformations: Prehistory to 1550. (Same as History 276.)]
281c - IP. The Courtly Society of Heian Japan. Fall 2012. Thomas D. Conlan.
Seminar. Japan's courtly culture spawned some of the greatest cultural achievements the world has ever known. Using the Tale of Genji, a tenth-century novel of romance and intrigue, attempts to reconstruct the complex world of courtly culture in Japan, where marriages were open and easy, even though social mobility was not; and where the greatest elegance, and most base violence, existed in tandem. (Same as History 281.)
Note: This course fulfills the pre-modern requirement for history majors.
282b - ESD, IP. Japanese Politics and Society. Fall 2011. Henry C. W. Laurence.
Comprehensive overview of modern Japanese politics in historical, social, and cultural context. Analyzes the electoral dominance of the Liberal Democratic Party, the nature of democratic politics, and the rise and fall of the economy. Other topics include the status of women and ethnic minorities, education, war guilt, nationalism, and the role of the media. (Same as Government 232.)

283c - ESD, IP. The Origins of Japanese Culture and Civilization. Fall 2012 and 2013. Thomas D. Conlan.

How do a culture, a state, and a society develop? Designed to introduce the culture and history of Japan by exploring how "Japan" came into existence, and to chatt how patterns of Japanese civilization shifted through time. Attempts to reconstruct the tenor of life through translations of primary sources, and to lead to a greater appreciation of the unique and lasting cultural and political monuments of Japanese civilization. (Same as History 283.)

Note: This course fulfills the pre-modern requirement for history majors.
284c - ESD, IP. The Emergence of Modern Japan. Spring 2013. Thomas D. Conlan.
What constitutes a modern state? How durable are cultures and civilizations? Examines the patterns of culture in a state that managed to expel European missionaries in the seventeenth century, and came to embrace all things Western as being "civilized" in the mid-nineteenth century. Compares the unique and vibrant culture of Tokugawa Japan with the rapid program of late-nineteenth-century industrialization, which resulted in imperialism, international wars and, ultimately, the postwar recovery. (Same as History 284.)

285c - IP. Conquests and Heroes. Spring 2014. Thomas D. Conlan.
Seminar. Examines the experience of war in China, Japan, and Europe in order to ascertain the degree to which war is a culturally specific act. Explores narratives of battle and investigates "heroic" qualities of European, Chinese, and Japanese figures. A secondary theme constitutes an examination of the impact the thirteenth-century Mongol Invasions had on each of these military cultures. (Same as History 285.)

Note: This course fulfills the pre-modern requirement for history majors.
286c - IP. Japan and the World. Fall 2014. Thomas D. Conlan.
Seminar. Explores Japan's relations with China, Korea, and Europe in premodern and modern contexts. Also explores larger issues of state identity and cultures in East Asia. (Same as History 286.)

Note: This course fulfills the pre-modern requirement for history majors.
287c - ESD, IP. Kingship in Comparative Perspective. Spring 2014. Thomas D. Conlan.
Seminar. What makes a king? How does one chatacterize or define sovereign authority and to what degree is this culturally specific? Explores the nature of kingship through a comparative perspective, contrasting Buddhist and Confucian notions of kingship and sovereignty. Focuses on Asia (South Asia, China, and Japan), although further insight is provided through comparisons with medieval Europe. (Same as History 287.)

## 289c - IP. Construction of the Goddess and Deification of Women in Hindu Religious

 Tradition. Fall 2011. Sree Padma Holt.Focuses include (1) an examination of the manner in which the power of the feminine has been expressed mythologically and theologically in Hinduism; (2) how various categories of goddesses can be seen or not as the forms of the "great goddess"; and (3) how Hindu women have been deified, a process that implicates the relationship between the goddess and women. Students read a range of works, primary sources, biographies and myths of deified women, and recent scholarship on goddesses and deified women. (Same as Gender and Women's Studies 289 and Religion 289.)

## Courses of Instruction

291c-299c. Intermediate Independent Study in Asian Studies. The Program.
332b. Advanced Seminar in Japanese Politics. Spring 2012. Henry C. W. Laurence.
Analyzes the political, social, and cultural underpinnings of modern politics, and asks how democracy works in Japan compared with other countries. Explores how Japan has achieved stunning material prosperity while maintaining among the best healthcare and education systems in the world, high levels of income equality, and low levels of crime. Students are also instructed in conducting independent research on topics of their own choosing. (Same as Government 332.)

Prerequisite: Asian Studies 282 (same as Government 232).
[337b. Advanced Seminar in Democracy and Development in Asia. (Same as Government 337.)]

344c. Religious Culture and Politics in Southeast Asia. Spring 2012. John Holt.
An examination and discussion of the ways in which changes in political economy and society have fostered fundamental changes in the religious cultures of modern Southeast Asia. Questions include: How have conceptions of power embedded in the traditional Buddhist concepts of the mandala and kingship been sustained or contested in contemporary Thai, Burmese, Lao, and Khmer politics? How have contemporary machinations of governments in Burma, Thailand, Laos, and Cambodia contributed to transformations in religious culture? How have religious ideas and practices abetted resistance to state hegemony in the highland communities of Burma, Laos, and Thailand? How are the deaths of war combatants and civilians remembered and commemorated in Vietnam and Cambodia? (Same as Government 393 and Religion 344.)

364c. Politics of Inequality in Modern India. Spring 2012. Rachel Sturman.
Examines how South Asians have conceptualized innate social differences (e.g., race, caste, religion, ethnicity, gender) as well as labor and poverty, and how they have put these ideas into practice during the past two centuries. Topics include histories of race, labor, sexuality, and citizenship under British imperialism and global capitalism; the emergence and vicissitudes of the concept of minority; and modern anti-caste struggles. Following a survey of major primary sources as well as recent scholarship in the field, students pursue projects of their own design, culminating in a substantial original research paper. (Same as History 364.)

380c. The Warrior Culture of Japan. Spring 2013. Thomas D. Conlan.
Explores the "rise" of the warrior culture of Japan. In addition to providing a better understanding of the judicial and military underpinnings of Japan's military "rule" and the nature of medieval Japanese warfare, shows how warriors have been perceived as a dominant force in Japanese history. Culminates in an extended research paper. (Same as History 380.)

Prerequisite: Asian Studies 283 (same as History 283) or 284 (same as History 284), or permission of the instructor.

Note: This course fulfills the pre-modern requirement for history majors.
401c-404c. Advanced Independent Study and Honors in Asian Studies. The Program.

## Language Courses

Chinese 101c. Elementary Chinese I. Fall 2011. Songren Cui.
A foundation course for communicative skills in modern Chinese (Mandarin). Five hours of
class per week. Introduction to the sound system, essential grammar, basic vocabulary, and approximately 350 characters (simplified version). Develops rudimentary communicative skills. No prerequisite. Followed by Chinese 102.
Chinese 102c. Elementary Chinese II. Spring 2012. Songren Cui.
A continuation of Chinese 101. Five hours of class per week. Covers most of the essential grammatical structures and vocabulary for basic survival needs and simple daily routine conversations. Introduction to the next 350 characters (simplified version), use of ChineseEnglish dictionary. Followed by Chinese 203.

Prerequisite: Chinese $\mathbf{1 0 1}$ or permission of the instructor.
Chinese 203c. Intermediate Chinese I. Fall 2011. Yuxia Xiu.
An intermediate course in modern Chinese. Five hours of class per week. Consolidates and expands the knowledge of grammar and vocabulary, with 400 additional characters. Further improves students' Chinese proficiency with a focus on accuracy, fluency, and complexity.
Followed by Chinese 204.
Prerequisite: Chinese $\mathbf{1 0 2}$ or permission of the instructor.
Chinese 204c. Intermediate Chinese II. Spring 2012. Yuxia Xiu.
A continuation of Chinese 203. Five hours of class per week. Further develops students' communicative competence and strives to achieve a balance between the receptive and productive skills. Students learn another 400 characters; read longer, more complex texts; and write short compositions with increasing discourse cohesion. Followed by Chinese 205.

Prerequisite: Chinese 203 or permission of the instructor.
Chinese 205c. Advanced-Intermediate Chinese I. Fall 2011. Songren Cui.
A pre-advanced course in modern Chinese. Three hours of class per week. Upgrades students’ linguistic skills and cultural knowledge to explore edited or semi-authentic materials. Followed by Chinese 206.

Prerequisite: Chinese 204 or permission of the instructor.
Chinese 206c. Advanced-Intermediate Chinese II. Spring 2012. Songren Cui.
A continuation of Chinese 205. Three hours of class per week. Focuses on the improvement of reading comprehension and speed, and essay writing skills. Deals particularly with edited and/or authentic materials from Chinese mass media such as newspapers and the Internet. Followed by Chinese 307.

Prerequisite: Chinese 205 or permission of the instructor.
Chinese 307c. Advanced Chinese I. Fall 2011. Shu-chin Tsui.
Designed to develop mastery of the spoken and written language. Emphasis given to reading and writing, with focus on accuracy, complexity, and fluency in oral as well as written expression. Assigned work includes written composition and oral presentations.

Prerequisite: Chinese 206 or permission of the instructor.
Chinese 308c. Advanced Chinese II. Spring 2012. Shu-chin Tsui.
Continuation of Chinese 307.
Prerequisite: Chinese 307 or permission of the instructor.

Courses of Instruction
Japanese 101c. Elementary Japanese I. Fall 2011. Mitsuko Numata.
An introductory course in modern Japanese language. In addition to mastering the basics of grammar, emphasis is placed on active functional communication in the language, reading, and listening comprehension. Context-oriented conversation drills are complemented by audio materials. The two kana syllabaries and 60 commonly used kanji are introduced. No prerequisite. Followed by Japanese 102.
Japanese 102c. Elementary Japanese II. Spring 2012. Mitsuko Numata.
A continuation of the fundamentals of Japanese grammar structures and further acquisition of spoken communication skills, listening comprehension, and proficiency in reading and writing. Introduces an additional 90 kanji.

Prerequisite: Japanese 101 or permission of the instructor.
Japanese 203c. Intermediate Japanese I. Fall 2011. Vyjayanthi Selinger.
An intermediate course in modern Japanese language, with introduction of advanced grammatical structures, vocabulary, and characters. Continuing emphasis on acquisition of well-balanced language skills based on an understanding of the actual use of the language in the Japanese sociocultural context. Introduces an additional 100 kanji.

Prerequisite: Japanese 102 or permission of the instructor.
Japanese 204c. Intermediate Japanese II. Spring 2012. Naho Maruta.
A continuation of Japanese 203 with the introduction of more advanced grammatical structures, vocabulary, and characters.

Prerequisite: Japanese $\mathbf{2 0 3}$ or permission of the instructor.
Japanese 205c. Advanced-Intermediate Japanese I. Fall 2011. Mitsuko Numata.
Increases students' proficiency in both spoken and written modern Japanese. A variety of written and audiovisual materials are used to consolidate and expand mastery of more advanced grammatical structures and vocabulary. Includes oral presentation, discussion, and composition in Japanese.

Prerequisite: Japanese $\mathbf{2 0 4}$ or permission of the instructor.
Japanese 206c. Advanced-Intermediate Japanese II. Spring 2012. Mitsuko Numata.
A continuation and progression of materials used in Japanese 205.
Prerequisite: Japanese 205 or permission of the instructor.
Japanese 307c. Advanced Japanese I. Fall 2011. Naho Maruta.
Designed to develop mastery of the spoken and written language. Materials from various sources such as literature, newspapers, and cultural journals as well as television programs and films are used. Assigned work includes written compositions and oral presentations.

Prerequisite: Japanese 206 or permission of the instructor.

## Japanese 308c. Advanced Japanese II. Spring 2012. Naho Maruta.

A continuation of Japanese 307. Continued efforts to develop oral and written fluency in informal and formal situations. Reading of contemporary texts of literature, business, and social topics.

Prerequisite: Japanese 307 or permission of the instructor.

## Bioghemistry

Anne E. McBride, Program Director
TBA, Program Coordinator
Professor: Bruce D. Kohorn $\dagger$ (Biology)
Associate Professor: Anne E. McBride (Biology)
Assistant Professors: Danielle H. Dube*(Chemistry), Benjamin C. Gorske (Chemistry)
Contributing Faculty: Richard D. Broene†, Barry A. Logan
Laboratory Instructor: Kate R. Farnham

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, including course descriptions, instructors, and semesters when these courses will next be offered.

## Requirements for the Major in Biochemistry

All majors must complete the following courses: Biology 102 or 109, 224; Chemistry 102 or 109, 225, 226, 232, 251; Mathematics 161, 171; Physics 103, 104. Majors must also complete two courses from the following: Biology 210 (same as Environmental Studies 210), 212, 214, $217,218,253,257,266,304,306,307,314,317,323,333,335,401-404$; Chemistry 210, 240, 252, 305 (same as Environmental Studies 305), 306 (same as Environmental Studies 306), 325, 326, 327, 331, 401-404; Physics 223, 401-404. Students may include as an elective one 400-level course. Students taking independent study courses for honors in the biochemistry major should register for Biochemistry 401-404.

Bowdoin College does not offer a minor in biochemistry.

## Advanced Courses

401a-404a. Advanced Independent Study and Honors in Biochemistry. The Department.

## Biology

Michael F. Palopoli, Department Chair<br>Julie J. Santorella, Department Coordinator

Professors: Patsy S. Dickinson (Neuroscience), Amy S. Johnson, Bruce D. Kohorn $\dagger$ (Biochemistry), Barry A. Logan, Carey R. Phillips, Nathaniel T. Wheelwright
Associate Professors: Hadley Wilson Horch $\dagger$ (Neuroscience), John Lichter (Environmental
Studies), Anne E. McBride (Biochemistry), Michael F. Palopoli
Assistant Professors: Jack R. Batemant, William R. Jackman, Vladimir Douhovnikoff
Visiting Faculty: Glen Ernstrom, Rachel Larsen, Osceola Whitney (Neuroscience)
Scholar: Trevor Rivers
Director of Bowdoin Scientific Station on Kent Island: Damon P. Gannon
Laboratory Instructors: Pamela J. Bryer, Nancy J. Curtis, Kate R. Farnham, Janet Gannon, Stephen A. Hauptman, Jaret S. Reblin, Elizabeth Koski Richards, Peter E. Schlax

## Requirements for the Major in Biology

The major consists of eight courses in the department exclusive of independent study and

## Courses of Instruction

courses below the 100 level. Majors are required to complete Biology 102 or 109, 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 250 .

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

Majors must also complete Mathematics 171 (or above) or Mathematics 161 and one of the following: Mathematics 165, Psychology 252. Additional requirements are Physics 103 (or any physics course that has a prerequisite of Physics 103), Chemistry 102 or 109, and Chemistry 225. Students are advised to complete Biology 102 or 109 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 an A or B grade in another course also required for the major. Courses that will count toward the major must be taken on a graded basis (not Credit/D/Fail).

## Interdisciplinary Majors

The department participates in interdisciplinary programs in biochemistry, environmental studies, and neuroscience. See pages 67, 126, and 223.

## Requirements for the Minor in Biology

The minor consists of two courses within the department at the 100 level or above, and two courses to be taken from two of the three core groups. See Requirements for the Major in Biology.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
[23a. Personal Genomes.]
25a. Venoms and Toxins. Fall 2011. Glen Ernstrom.

## Introductory, Intermediate, and Advanced Courses

[55a - INS. Science of Food and Wine. (Same as Chemistry 55.)]

61a - INS. Your First Nine Months: From Conception to Birth. Spring 2013. Carey R. Phillips.
Covers the biological events from the process of fertilization through early development and birth of a human. Intended for those who have had little biology or do not intend to major in biology. Explores the formation of the major organ systems and how the parts of the body are constructed in the correct places and at the correct times. Also discusses topics such as cloning and the effects of prenatal use of drugs as they relate to the biological principles involved in early human development. Includes a few in-class laboratory sessions in which students learn to do experiments, and collect, analyze, and interpret data.

71a - INS, VPA. Bird Song, Human Song. Spring 2012. Robert Greenlee and Nathaniel T. Wheelwright.

A study of avian and human melodies, including the mechanics, anatomy, neurobiology, and endocrinology of sound production and recognition in birds and humans; ecological and evolutionary contexts of song; and interspecific influences on songs. Songs and calls, identified aurally and through sonograms and basic music notation, are used to inspire new musical compositions that explore the musical relationships between humans and birds. Required field trips, research projects, and anatomy laboratories. Although no music or biology experience is required or presumed, students should have a strong interest in learning about birds and music. (Same as Environmental Studies 71 and Music 71.)

83a - INS. Living Together with Microbes. Spring 2012. Rachel Larsen.
Did you know that there are more bacterial cells than human cells in your body? Covers many of the good things these bacteria do for us including aiding in our digestion and providing essential vitamins. Explores how disease-causing bacteria and viruses find ways to attempt to live with us and how we fight back. Also investigates diverse symbiotic relationships observed in nature.

85a - INS. From Brain to Behavior. Fall 2013. Hadley Wilson Horch.
All human social, cognitive, and sexual behaviors require complex functions of the nervous system. For example, the brain and spinal cord together work to control body movements, senses, learning and memory, language, emotions, dreaming, and all other complex thought processes. Surveys the biology underlying these nervous system functions. Diseases of the brain, drug actions, injury and repair are also discussed. Includes comparative examinations of nervous systems in other organisms.

101a - MCSR, INS. Biological Principles I. Fall 2011. Anne McBride.
The first in a two-semester introductory biology sequence. Topics include fundamental principles of cellular and molecular biology with an emphasis on providing a problem-solving approach to an understanding of genes, RNA, proteins, and cell structure and communication. Focuses on developing quantitative skills, as well as critical thinking and problem solving skills. Lecture and weekly laboratory/discussion groups. To ensure proper placement, students must take the biology placement examination and must be recommended for placement in Biology 101. Students continuing in biology will take Biology 102, not Biology 109, as their next biology course.

102a - MCSR, INS. Biological Principles II. Spring 2012. Barry Logan.
The second in a two-semester introductory biology sequence. Emphasizes fundamental biological principles extending from the physiological to the ecosystem level of living organisms. Topics include physiology, ecology, and evolutionary biology, with a focus on

## Courses of Instruction

developing quantitative skills as well as critical thinking and problem solving skills. Lecture and weekly laboratory/discussion groups.

## Prerequisite: Biology 101.

109a - MCSR, INS. Scientific Reasoning in Biology. Every semester. Fall 2011. Amy S. Johnson and Michael F. Palopoli. Spring 2012. Vladamir Douhovnikoff and William Jackman.

Lectures examine fundamental biological principles, from the sub-cellular to the ecosystem level with an emphasis on critical thinking and the scientific method. Laboratory sessions will help develop a deeper understanding of the techniques and methods of the biological science by requiring students to design and conduct their own experiments. Lecture and weekly laboratory/discussion groups. To ensure proper placement, students must take the biology placement examination and must be recommended for placement in Biology 109.
154a. Ecology of the Gulf of Maine and Bay of Fundy. Fall 2012. Damon Gannon.
The Gulf of Maine/Bay of Fundy system is a semi-enclosed sea bordered by three U.S. states and two Canadian provinces. It supports some of the world's most productive fisheries and played a key role in European colonization of North America. Investigates how the species found in this body of water interact with each other and with the abiotic components of their environment. Topics include natural history; geological and physical oceanography; characteristics of major habitats; biology of macroinvertebrates, fishes, seabirds, and marine mammals; biogeography; food webs; and fisheries biology. Examines how human activities such as fishing, aquaculture, shipping, and coastal development affect the ecology of the region. Includes lectures, discussions of the primary literature, and field excursions. (Same as Environmental Studies 154.)

## Prerequisite: Biology 102 or 109.

158a - MCSR, INS. Perspectives in Environmental Science. Every spring. Spring 2012. John Lichter and Dharni Vasudevan.
Functioning of the earth system is defined by the complex and fascinating interaction of processes within and between four principal spheres: land, air, water, and life. Leverages key principles of environmental chemistry and ecology to unravel the intricate connectedness of natural phenomena and ecosystem function. Fundamental biological and chemical concepts are used to understand the science behind the environmental dilemmas facing societies as a consequence of human activities. Laboratory sessions consist of local field trips, laboratory experiments, group research, case study exercises, and discussions of current and classic scientific literature. (Same as Chemistry 105 and Environmental Studies 201.)
Prerequisite: One 100-level or higher course in biology, chemistry, earth and oceanographic science, or physics.

174a - MCSR. Biomathematics. Every fall. Fall 2011. Mary Lou Zeeman.
A study of mathematical methods driven by questions in biology. Biological questions are drawn from a broad range of topics, including disease, ecology, genetics, population dynamics, neurobiology, endocrinology, and biomechanics. Mathematical methods include compartmental models, matrices, linear transformations, eigenvalues, eigenvectors, matrix iteration, and simulation; ODE models and simulation, stability analysis, attractors, oscillations and limiting behavior, mathematical consequences of feedback, and multiple time-scales. Three hours of class meetings and two hours of computer laboratory sessions per week. Within the biology
major, this course may count as the mathematics credit or as biology credit, but not both. Students are expected to have taken a year of high school or college biology prior to this course. (Same as Mathematics 204.)

Prerequisite: Mathematics $\mathbf{1 6 1}$ or higher, or permission of the instructor.
202. 3-D Digital Animation Studio. Fall 2011 and 2012. Carey R. Phillips.

Explores the uses of art and three-dimensional animations in communicating complex dynamic and spatial relationships, primarily as they pertain to explaining scientific concepts. Students use primary literature to explore a science problem in a seminar-type format. Study of filmmaking and use of high-end three-dimensional animation software. Concludes with a team effort to create a three-dimensional animated film of the science problem. (Same as Visual Arts 255.)
210a - MCSR, INS. Plant Physiology. Fall 2011. Barry A. Logan.
An introduction to the physiological processes that enable plants to grow under the varied conditions found in nature. General topics discussed include the acquisition, transport, and use of water and mineral nutrients, photosynthetic carbon assimilation, and the influence of environmental and hormonal signals on development and morphology. Adaptation and acclimation to extreme environments and other ecophysiological subjects are also discussed. Weekly laboratories reinforce principles discussed in lecture and expose students to modern research techniques. (Same as Environmental Studies 210.)
Prerequisite: Biology 102 or 109.
212a - MCSR, INS. Genetics and Molecular Biology. Spring 2012. Glen Ernstrom.
Integrated coverage of organismic and molecular levels of genetic systems. Topics include modes of inheritance, the structure and function of chromosomes, the mechanisms and control of gene expression, recombination, mutagenesis, techniques of molecular biology, and human genetic variation. Laboratory sessions are scheduled.

Prerequisite: Biology 102 or 109.
213a - MCSR, INS. Neurobiology. Fall 2011. Osceola Whitney.
Examines fundamental concepts in neurobiology from the molecular to the systems level. Topics include neuronal communication, gene regulation, morphology, neuronal development, axon guidance, mechanisms of neuronal plasticity, sensory systems, and the molecular basis of behavior and disease. Weekly lab sessions introduce a wide range of methods used to examine neurons and neuronal systems.
Prerequisite: One of the following: Biology 102 or 109, or Psychology 251.
214a - MCSR, INS. Comparative Physiology. Every spring. Patsy Dickinson.
An examination of animal function, from the cellular to the organismal level. The underlying concepts are emphasized, as are the experimental data that support our current understanding of animal function. Topics include the nervous system, hormones, respiration, circulation, osmoregulation, digestion, and thermoregulation. Labs are short, student-designed projects involving a variety of instrumentation. Lectures and four hours of laboratory work per week.

Prerequisite: Biology 102 or 109.

## Courses of Instruction

215a - MCSR, INS. Behavioral Ecology and Population Biology. Every fall. Nathaniel T. Wheelwright.
Study of the behavior of animals and plants, and the interactions between organisms and their environment. Topics include population growth and structure, and the influence of competition, predation, and other factors on the behavior, abundance, and distribution of plants and animals. Laboratory sessions, field trips, and research projects emphasize concepts in ecology, evolution and behavior, research techniques, and the natural history of local plants and animals. Optional field trip to the Bowdoin Scientific Station on Kent Island. (Same as Environmental Studies 215.)
Prerequisite: Biology 102 or 109.

## 216a - MCSR, INS. Evolution. Every spring. Michael Palopoli.

Examines one of the most breathtaking ideas in the history of science-that all life on this planet descended from a common ancestor. An understanding of evolution illuminates every subject in biology, from molecular biology to ecology. Provides a broad overview of evolutionary ideas, including the modern theory of evolution by natural selection, evolution of sexual reproduction, patterns of speciation and macro-evolutionary change, evolution of sexual dimorphisms, selfish genetic elements, and kin selection. Laboratory sessions are devoted to semester-long, independent research projects.
Prerequisite: Biology 102 or 109.
217a - MCSR, INS. Developmental Biology. Every fall. William R. Jackman.
An examination of current concepts of embryonic development, with an emphasis on experimental design. Topics include cell fate specification, morphogenetic movements, cell signaling, differential gene expression and regulation, organogenesis, and the evolutionary context of model systems. Project-oriented laboratory work emphasizes experimental methods. Lectures and three hours of laboratory per week.
Prerequisite: Biology 102 or 109.

## 218a - INS. Microbiology. Every spring. Anne McBride.

An examination of the structure and function of microorganisms, from viruses to bacteria to fungi, with an emphasis on molecular descriptions. Subjects covered include microbial structure, metabolism, and genetics. Control of microorganisms and environmental interactions are also discussed. Laboratory sessions every week. Chemistry 225 is recommended.

Prerequisite: Biology 102 or 109.
219a - MCSR, INS. Biology of Marine Organisms. Every fall. Amy S. Johnson.
The study of the biology and ecology of marine mammals, seabirds, fish, intertidal and subtidal invertebrates, algae, and plankton. Also considers the biogeographic consequences of global and local ocean currents on the evolution and ecology of marine organisms. Laboratories, field trips, and research projects emphasize natural history, functional morphology, and ecology. Lectures and four hours of laboratory or field trip per week. One weekend field trip included. (Same as Environmental Studies 219.)
Prerequisite: Biology 102 or 109.
224a - MCSR, INS. Biochemistry and Cell Biology. Fall 2011. Rachel Larsen.
Focuses on the structure and function of cells as we have come to know them through the interpretation of direct observations and experimental results. Emphasis is on the scientific
(thought) processes that have allowed us to understand what we know today, emphasizing the use of genetic, biochemical, and optical analysis to understand fundamental biological processes. Covers details of the organization and expression of genetic information, and the biosynthesis, sorting, and function of cellular components within the cell. Concludes with examples of how cells perceive signals from other cells within cell populations, tissues, organisms, and the environment. Three hours of lab each week. Chemistry 225 is recommended.

## Prerequisite: Biology 102 or 109.

225a - MCSR, INS. Biodiversity and Conservation Science. Fall 2011. John Lichter.
People rely on nature for food, materials, medicines, and recreation; yet the fate of Earth's biodiversity is rarely given priority among the many pressing problems facing humanity today. Explores the interactions within and among populations of plants, animals, and microorganisms, and the mechanisms by which those interactions are regulated by the physical and chemical environment. Major themes are biodiversity and the processes that maintain biodiversity, the relationship between biodiversity and ecosystem function, and the science underlying conservation efforts. Laboratory sessions consist of student research, local field trips, laboratory exercises, and discussions of current and classic ecological literature. (Same as Environmental Studies 225.)

Prerequisite: Biology 102 or 109, or Environmental Studies 201 (same as Biology 158 and Chemistry 105).

253a. Neurophysiology. Fall 2011. Patsy S. Dickinson.

A comparative study of the function of the nervous system in invertebrate and vertebrate animals. Topics include the physiology of individual nerve cells and their organization into larger functional units, the behavioral responses of animals to cues from the environment, and the neural mechanisms underlying such behaviors. Lectures and four hours of laboratory work per week.
Prerequisite: Biology 102 or 109; and Biology 213, 214, or Psychology 218.
254a - MCSR, INS. Biomechanics. Spring 2012. Amy S. Johnson.
Examines the quantitative and qualitative characterization of organismal morphology, and explores the relationship of morphology to measurable components of an organism's mechanical, hydrodynamic, and ecological environment. Lectures, labs, field trips, and individual research projects emphasize (1) analysis of morphology, including analyses of the shape of individual organisms as well as of the mechanical and molecular organization of their tissues; (2) characterization of water flow associated with organisms; and (3) analyses of the ecological and mechanical consequences to organisms of their interaction with their environment. Introductory physics and calculus are strongly recommended.

Prerequisite: Biology 102 or $\mathbf{1 0 9}$, or one 100 -level course in chemistry, earth and oceanographic science, mathematics, or physics.

## [258a. Ornithology.]

266a. Molecular Neurobiology. Spring 2012. Osceola Whitney.
Examination of the molecular control of neuronal structure and function. Topics include the molecular basis of neuronal excitability, the factors involved in chemical and contact-mediated neuronal communication, and the complex molecular control of developing and regenerating
nervous systems. Weekly laboratories complement lectures by covering a range of molecular and cellular techniques used in neurobiology and culminate in brief independent projects.

Prerequisite: Biology 102 or 109; and one of the following: Biology 212, 213, 224, 253, or Psychology 218.
[271a. Biology of Marine Mammals. (Same as Environmental Studies 271.)]
274a - MCSR, INS. Marine Conservation Biology. Fall 2011. Damon P. Gannon.
Introduces key biological concepts that are essential for understanding conservation issues. Explores biodiversity in the world's major marine ecosystems; the mechanisms of biodiversity loss at the genetic, species, and ecosystem levels; and the properties of marine systems that pose unique conservation challenges. Investigates the theory and practice of marine biodiversity conservation, focusing on the interactions among ecology, economics, and public policy. Consists of lecture/discussion, lab, field trips, guest seminars by professionals working in the field, and student-selected case studies. (Same as Environmental Studies 274.)

Prerequisite: One of the following: Biology 154 (same as Environmental Studies 154), Biology 215 (same as Environmental Studies 215), Biology 219 (same as Environmental Studies 219), or Biology 225 (same as Environmental Studies 225), Environmental Studies 101, Environmental Studies 201 (same as Biology 158 and Chemistry 105), or permission of the instructor.

280a. Plant Responses to the Environment. Spring 2013. Barry A. Logan.
Plants can be found growing under remarkably stressful conditions. Even your own backyard poses challenges to plant growth and reproduction. Survival is possible only because of a diverse suite of elegant physiological and morphological adaptations. The physiological ecology of plants from extreme habitats (e.g., tundra, desert, hypersaline) is discussed, along with the responses of plants to environmental factors such as light and temperature. Readings from the primary literature facilitate class discussion. Excursions into the field and laboratory exercises complement class material. (Same as Environmental Studies 280.)

Prerequisite: Biology 210 or $\mathbf{2 2 5}$, or permission of the instructor.
291a-294a. Intermediate Independent Study in Biology. The Department.
302a. Earth Climate History and Its Impacts on Ecosystems and Human Civilizations. Spring 2012. Philip Camill.

The modern world is experiencing rapid climate warming and some parts extreme drought, which will have dramatic impacts on ecosystems and human societies. How do contemporary warming and aridity compare to past changes in climate over the last billion years? Are modern changes human-caused or part of the natural variability in the climate system? What effects did past changes have on global ecosystems and human societies? Students use environmental records from rocks, soils, ocean cores, ice cores, lake cores, fossil plants, and tree rings to assemble proxies of past changes in climate, atmospheric $\mathrm{CO}_{2}$, and disturbance to examine several issues: long-term carbon cycling and climate, major extinction events, the rise of C 4 photosynthesis and the evolution of grazing mammals, orbital forcing and glacial cycles, glacial refugia and post-glacial species migrations, climate change and the rise and collapse of human civilizations, climate/overkill hypothesis of Pleistocene megafauna, climate variability, drought cycles, climate change impacts on disturbances (fire and hurricanes), and determining natural variability vs. human-caused climate change. One introductory biology (with ecology
or evolution focus), chemistry, or earth and oceanographic science course is required. Prior enrollment in a 200 -level ecology or earth and oceanographic science course is recommended. (Same as Earth and Oceanographic Science 302 and Environmental Studies 302.)

304a. Topics in Molecular Biology. Fall 2011. Anne E. McBride.

Seminar exploring the numerous roles of ribonucleic acid, from the discovery of RNA as a cellular messenger to the development of RNAs to treat disease. Topics covered also include RNA enzymes, interactions of RNA viruses with host cells, RNA tools in biotechnology, and RNA as a potential origin of life. Focuses on discussions of papers from the primary literature.

Prerequisite: Biology 212, 218, 224, or Chemistry 232, or permission of the instructor.
306a. Free Radicals and Antioxidants. Spring 2012. Barry Logan.
Ordinary cellular metabolism in aerobic environments results in the production of free radicals, and free radical-mediated cellular damage underlies many human diseases. In response to the danger they pose, organisms evolved elaborate antioxidant systems that detoxify free radicals. The biology of free radicals and antioxidants in organisms ranging from bacteria to plants to humans is discussed, along with the importance of free radicals in disease processes.

Prerequisite: One 200-level or higher course in biology, or permission of the instructor.
307a. Evolutionary Developmental Biology. Spring 2012. William Jackman.
Advanced seminar investigating the synergistic but complex interface between the fields of developmental and evolutionary biology. Topics include the evolution of novel structures, developmental constraints to evolution, evolution of developmental gene regulation, and the generation of variation. Readings and discussions from the primary scientific literature.
Prerequisite: Biology 216 or 217, or permission of the instructor.
313a. Advanced Seminar in Behavioral Neuroscience. Spring 2012. Osceola Whitney.
Focuses on genes and regulatory sequences that contribute to the organization and functioning of neural circuits and molecular pathways in the brain that support social behavior. Topics of interest and discussion include the functional genomics of neural and behavioral plasticity in cichlid fishes, gene regulation and social behavior in honey bees, learned vocal communication in songbirds, and epigenetic regulation of gene expression and behavior. (Same as
Psychology 313.)
Prerequisite: Psychology 218 or Biology 213; one of the following: Psychology 251, Biology 102 or 109; and Psychology 252 or Mathematics 165.

## 314a. Advanced Genetics and Epigenetics. Fall 2012. Jack R. Bateman.

A seminar exploring the complex relationship between genotype and phenotype, with an emphasis on emerging studies of lesser-known mechanisms of inheritance and gene regulation. Topics include dosage compensation, parental imprinting, paramutation, random monoallelic expression, gene regulation by small RNAs, DNA elimination, copy number polymorphism, and prions. Reading and discussion of articles from the primary literature.
Prerequisite: Biology 212.
317a. Molecular Evolution. Spring 2012 and Fall 2012. Michael F. Palopoli.
The dynamics of evolutionary change at the molecular level are examined. Topics include neutral theory of molecular evolution, rates and patterns of change in nucleotide sequences

## Courses of Instruction

and proteins, molecular phylogenetics, and genome evolution. Students read and discuss papers from the scientific literature, and complete independent projects in the laboratory.

Prerequisite: One of the following: Biology 212, 216, 217, 218, or 224, or permission of the instructor.

## [318a. Neuroethology. (Same as Psychology 318.)]

323a. Life in Extreme Environments. Spring 2012. Rachel Larsen.
Microbes can be found living in nearly every niche on earth including many that were once thought to be devoid of life. Topics include the dramatic adaptations necessary for survival and growth in extremes such as thermal vents, acid pools, desert rocks, and ancient ice. Also considers how more familiar microbes may have versatile lifestyles and adapt to varying conditions and stressors through gene regulation.

Prerequisite: One of the following: Biology 212, 217, 218, or 224, or permission of the instructor.

325a. Topics in Neuroscience. Fall 2011. Patsy Dickinson.
An advanced seminar focusing on one or more aspects of neuroscience, such as neuronal regeneration and development, modulation of neuronal activity, or the neural basis of behavior. Students read and discuss original papers from the literature.
Prerequisite: One of the following: Biology 213, 253, 266, or Psychology 275 or 276, or permission of the instructor.

## 329a. Neuronal Regeneration. Fall 2012. Hadley W. Horch.

The consequences of neuronal damage in humans, especially in the brain and spinal cord, are frequently devastating and permanent. Invertebrates, on the other hand, are often capable of complete functional regeneration. This course examines the varied responses to neuronal injury in a range of species. Topics include neuronal regeneration in planaria, insects, amphibians, and mammals. Students read and discuss original papers from the literature in an attempt to understand the basis of the radically different regenerative responses mounted by a variety of neuronal systems.

Prerequisite: One of the following: Biology 212, 213, 217, 224, 253, 266, or Psychology 275 or 276, or permission of the instructor.

## 333a. Advanced Cell and Molecular Biology. Spring 2013. Bruce D. Kohorn.

An exploration of the multiple ways cells have evolved to transmit signals from their external environment to cause alterations in cell architecture, physiology, and gene expression. Examples are drawn from both single-cell and multi-cellular organisms, including bacteria, fungi, algae, land plants, insects, worms, and mammals. Emphasis is on the primary literature, with directed discussion and some background introductory remarks for each class.
Prerequisite: Biology 224 or permission of the instructor.
335a. Neurogenetics. Fall 2011. Glen Ernstrom.
A seminar examining the use of genetic analyses in model organisms to dissect neuronal function and behavior. Introduces optogenetics and advances in microscopy used to track genetically encoded fluorescent probes. Reading and discussion of research papers from the primary literature.

Prerequisite: One of the following: Biology 212, 213, 217, 224 or 266.

394a. Ecological Recovery of Maine's Coastal Ecosystems. Fall 2011. John Lichter.
Maine's coastal ecosystems once supported prodigious abundances of wildlife that supported human communities for millennia before succumbing to multiple anthropogenic stresses in the mid-twentieth century. Today, we need to understand the most pressing ecological and social constraints limiting recovery of these once vital ecosystems to achieve sustainable ecological recovery and provision of ecosystem services. Objective is to better understand the biophysical and social constraints limiting ecological recovery, and to rethink the failed management policies of the past. Students participate in a thorough review of the relevant scientific and historical literature and conduct a group study investigating some aspect of the ecology and/or the environmental history of Maine's coastal ecosystems. (Same as Environmental Studies 394.)

Prerequisite: Biology 215 (same as Environmental Studies 215), 219 (same as
Environmental Studies 219), or 225 (same as Environmental Studies 225); or Environmental Studies 201 (same as Biology 158 and Chemistry 105).

397a. Advanced Winter Field Ecology. Spring 2012. Nathaniel T. Wheelwright.
Exploration of advanced concepts in ecology and evolutionary biology, and the natural history of plants, animals, and ecosystems in winter in Maine. Structured around group research projects in the field. Each week, field trips focus on a different study site, set of questions, and taxon (e.g., host specificity in wood fungi, foraging behavior of aquatic insects under the ice, estimation of mammal population densities, winter flocking behavior in birds). Students learn to identify local winter flora and fauna, critically evaluate readings from the primary literature, analyze data from field research projects, and present their results each week in a research seminar. Required field trip to the Bowdoin Scientific Station on Kent Island. (Same as Environmental Studies 397.)

Prerequisite: Biology 215 (same as Environmental Studies 215) or 258, or permission of the instructor.

401a-404a. Advanced Independent Study and Honors in Biology. The Department.

## Chemistry

Elizabeth A. Stemmler, Department Chair<br>TBA, Department Coordinator

Professors: Richard D. Broene†, Ronald L. Christensen*, Jeffrey K. Nagle, Elizabeth A. Stemmler Associate Professor: Dharni Vasudevan (Environmental Studies)
Assistant Professors: Danielle H. Dube* (Biochemistry), Benjamin C. Gorske (Biochemistry) Lecturer: Michael P. Danahy
Visiting Faculty: Yi Jin Gorske, Daniel M. Steffenson
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 101 and 102 or 109,

210, 225, 240, Mathematics 171 or higher, Physics 103 and 104 (for students who place into Physics 104 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 226, 251, and 252. Any two electives from the following: Chemistry 232 and chemistry courses at the 300 level or above (only one 400 -level course may count towards the major).

Educational: Chemistry 251 or 252, Education 20 or 101, 203, 301, 303, and two additional chemistry electives selected in consultation with the advisor.

Environmental: Chemistry 251, and four electives that must include at least two molecular perspective courses from the following: Chemistry 205 (same as Environmental Studies 205), 305 (same as Environmental Studies 305), 306 (same as Environmental Studies 306), 310; and at least one environmental perspectives course from the following: Earth and Oceanographic Science 200 (same as Environmental Studies 200), 267 (same as Environmental Studies 267), 282 (same as Environmental Studies 282), Physics 257 (same as Earth and Oceanographic Science 257 and Envitonmental Studies 253), 357 (same as Earth and Oceanographic Science 357 and Environmental Studies 357), Biology 225 (same as Environmental Studies 225), or 394 (same as Environmental Studies 394). At least one course from the concentration must be at the 300 level.

Geochemical: Chemistry 205 (same as Earth and Oceanographic Science 205), 251, and 310; and at least two electives from the following: Earth and Oceanographic Science 200 (same as Environmental Studies 200), 262, 267 (same as Environmental Studies 267), 282 (same as Environmental Studies 282), 302, or 315. At least one elective from the concentration must be at the 300 level.

Neurochemical: Biology 102 or 109 , Chemistry 226, 232, and 251 or 252 ; and two electives from the following: Biology 213, 253, 266, and one 300 level neuroscience course.

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 on a graded basis. Under special circumstances, however, a student may petition the department chair to allow one required chemistry course and/or one other course required for the major or minor (Mathematics 161 or 171, or Physics 103 or 104) 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 291-294, 401-404, or summer research).
The department also offers an American Chemical Society-certified major in chemistry. The requirements for certification are met by taking advanced electives in chemistry-Chemistry 232, 310, and 340; two semesters of laboratory-based independent study; and Mathematics 181. Students interested in this certification program should consult with the department.

## Independent Study

Students may engage in independent study at the intermediate (291-294) or advanced (401-404) level.

## Interdisciplinary Majors

The department participates in interdisciplinary programs in biochemistry, chemical physics, and environmental studies. See pages 67, 198, and 126.

## Requirements for the Minor in Chemistry

The minor consists of four chemistry courses at or above the 200 level. Biochemistry majors may not minor in chemistry.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
11a. Great Issues in Science. Fall 2011. Daniel M. Steffenson.
Introductory, Intermediate, and Advanced Courses
[55a - INS. Science of Food and Wine. (Same as Biology 55.)]
[56a - MCSR, INS. Investigations: The Chemistry of Forensic Science.]
[57a - INS. Chemistry of Poisons.]
[58a - INS. Drug Discovery.]
59a - INS. Chemistry of Consumer Goods. Spring 2012. Yi Jin Gorske.
Natural and synthetic "chemicals" make up virtually everything we purchase and consume from breakfast cereals to soaps, shampoo bottles, and over-the-counter medications. Examines the chemical components of food, drugs, soaps, plastics, and other consumer goods we encounter daily. Explores scientific resources that can be used to obtain information on product components, safety, and regulations. Also considers topics related to some of the current safety concerns raised by chemicals found in common household items through case studies and research projects. Assumes no background in science. Not open to students who have credit for a chemistry course numbered 100 or higher.
101a - INS. Introductory Chemistry I. Every fall. Jeffrey K. Nagle.
The first course in a two-semester introductory college chemistry sequence. Introduction to the states of matter and their properties, stoichiometry and the mole unit, properties of gases, thermochemistry, atomic structure, and periodic properties of the elements. Lectures, review sessions, and four hours of laboratory work per week. To ensure proper placement, students must take the chemistry placement examination and must be recommended for placement in Chemistry 101. Students continuing in chemistry will take Chemistry 102, not Chemistry 109, as their next chemistry course. 102a - MCSR, INS. Introductory Chemistry II. Every spring. Elizabeth A. Stemmler. The second course in a two-semester introductory college chemistry sequence. Introduction to chemical bonding and intermolecular forces; characterization of chemical systems at equilibrium and spontaneous processes; the rates of chemical reactions; and special topics. Lectures, review sessions, and four hours of laboratory work per week.
Prerequisite: Chemistry 101 or permission of the instructor.

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105a - MCSR, INS. Perspectives in Environmental Science. Every spring. Spring 2012. John Lichter and Dharni Vasudevan.

Functioning of the earth system is defined by the complex and fascinating interaction of processes within and between four principal spheres: land, air, water, and life. Leverages key principles of environmental chemistry and ecology to unravel the intricate connectedness of natural phenomena and ecosystem function. Fundamental biological and chemical concepts are used to understand the science behind the environmental dilemmas facing societies as a consequence of human activities. Laboratory sessions consist of local field trips, laboratory experiments, group research, case study exercises, and discussions of current and classic scientific literature. (Same as Biology 158 and Environmental Studies 201.)

Prerequisite: One 100 -level or higher course in biology, chemistry, earth and oceanographic science, or physics.

109a - MCSR, INS. General Chemistry. Every fall and spring. Fall 2011. Michael P. Danahy. Spring 2012. Ronald L. Christensen and Daniel M. Steffenson.

A one-semester introductory chemistry course. Introduction to models of atomic structure, chemical bonding, and intermolecular forces; characterization of chemical systems at equilibrium and spontaneous processes; the rates of chemical reactions; and special topics. Lectures, review sessions, and four hours of laboratory work per week. To ensure proper placement, students must take the chemistry placement examination and must be recommended for placement in Chemistry 109.

210a - MCSR, INS. Chemical Analysis. Every fall. Elizabeth A. Stemmler.
Methods of separating and quantifying inorganic and organic compounds using volumetric, spectrophotometric, electrometric, and chromatographic techniques are covered. Chemical equilibria and the statistical analysis of data are addressed. Lectures and four hours of laboratory work per week.

Prerequisite: Chemistry 102 or $\mathbf{1 0 9}$, or any 200 -level course in chemistry.
225a. Organic Chemistry I. Every fall. Michael P. Danahy, Benjamin C. Gorske, and Yi Jin Gorske.

Introduction to the chemistry of the compounds of carbon. Describes bonding, conformations, and stereochemistry of small organic molecules. Reactions of hydrocarbons, alkyl halides, and alcohols are discussed. Kinetic and thermodynamic data are used to formulate reaction mechanisms. Lectures, review sessions, and four hours of laboratory work per week.

Prerequisite: Chemistry 102 or $\mathbf{1 0 9}$, or any 200 -level course in chemistry.
226a. Organic Chemistry II. Every spring. Michael P. Danahy, Benjamin C. Gorske, and Yi Jin Gorske.

Continuation of the study of the compounds of carbon. Highlights the reactions of aromatic, carbonyl-containing, and amine functional groups. Mechanistic reasoning provides a basis for understanding these reactions. Skills for designing logical synthetic approaches to complex organic molecules are developed. Chemistry 225 and 226 cover the material of the usual course in organic chemistry and form a foundation for further work in organic chemistry and biochemistry. Lectures, review sessions, and four hours of laboratory work per week.

Prerequisite: Chemistry 225.

232a - MCSR. Biochemistry. Every spring. Danielle H. Dube.
Focuses on the chemistry of living organisms. Topics include structure, conformation, and properties of the major classes of biomolecules (proteins, nucleic acids, carbohydrates, and lipids); enzyme mechanisms, kinetics, and regulation; metabolic transformations; energetics and metabolic control. Lectures and four hours of laboratory work per week.
Prerequisite: Chemistry 226.
240a - MCSR, INS. Inorganic Chemistry. Every spring. Jeffrey K. Nagle.
An introduction to the chemistry of the elements with a focus on chemical bonding, periodic properties, and coordination compounds. Topics in solid state, bioinorganic, and environmental inorganic chemistry also are included. Provides a foundation for further work in chemistry and biochemistry. Lectures and four hours of laboratory work per week.
Prerequisite: Chemistry 102 or 109 , or any 200 -level course in chemistry.
251a - MCSR, INS. Chemical Thermodynamics and Kinetics. Every fall. Daniel M. Steffenson.

Thermodynamics and its application to chemical changes and equilibria that occur in the gaseous, solid, and liquid states. The behavior of systems at equilibrium and chemical kinetics are related to molecular properties by means of statistical mechanics and the laws of thermodynamics. Lectures and four hours of laboratory work per week. Mathematics $\mathbf{1 8 1}$ is recommended.

Prerequisite: Chemistry $\mathbf{1 0 2}$ or $\mathbf{1 0 9}$, or any 200 -level course in chemistry; Mathematics $\mathbf{1 7 1}$ or higher, and Physics 104; or permission of the instructor.
252a - MCSR, INS. Quantum Chemistry and Spectroscopy. Every spring. Ronald L. Christensen.

Development and principles of quantum chemistry with applications to atomic structure, chemical bonding, chemical reactivity, and molecular spectroscopy. Lectures and four hours of laboratory work per week. Mathematics 181 is recommended.
Prerequisite: Chemistry 102 or 109 , or any 200 -level course in chemistry; Mathematics 171 or higher; and Physics 104; or permission of the instructor.
Note: Chemistry 251 is not a prerequisite for Chemistry 252.
291a-294a. Intermediate Independent Study in Chemistry. The Department.
Laboratory or literature-based investigation of a topic in chemistry. Topics are determined by the student and a supervising faculty member. Designed for students who have not completed at least four of the 200 -level courses required for the chemistry major.
305a. Environmental Fate of Organic Chemicals. Spring 2012. Dharni Vasudevan.
More than 100,000 synthetic chemicals are currently in daily use. In order to determine the risk posed to humans and ecosystems, we need to understand and anticipate the extent and routes of chemical exposure. Addresses the fate of organic chemicals following their intentional or unintentional release into the environment. Why do these chemicals either persist or break down, and how are they distributed between surface water, ground water, soil, sediments, biota, and air? Analysis of chemical structure used to gain insight into molecular interactions that

## Courses of Instruction

determine the various chemical transfer and transformation processes, while emphasizing the quantitative description of these processes. (Same as Environmental Studies 305.)

Prerequisite: Chemistry 225.
[306a. Advanced Environmental Organic Chemistry. (Same as Environmental Studies 306.)]
310a. Instrumental Analysis. Fall 2011. Elizabeth A. Stemmler.
Theoretical and practical aspects of instrumental techniques, including nuclear magnetic resonance spectroscopy, infrared spectroscopy, Raman spectroscopy, and mass spectrometry are covered, in conjunction with advanced chromatographic methods. Applications of instrumental techniques to the analysis of biological and environmental samples are covered. Lectures and two hours of laboratory work per week.
Prerequisite: Chemistry 210 or permission of the instructor.
[326a. Advanced Topics in Organic Chemistry.]
327a. Biomimetic and Supramolecular Chemistry. Fall 2011. Benjamin Gorske.
A guided exploration of the primary scientific literature concerning weak covalent and noncovalent interactions that collectively determine the three-dimensional structures of biomimetic and foldameric molecules and that govern the aggregation of molecules into discrete multi-molecular assemblies. Surveys practical applications in biochemical investigation, catalysis, and medicine, as well as in the young but rapidly expanding sciences of molecular and nanostructural engineering.

Prerequisite: Chemistry 226.

## [331a. Chemical Biology.]

340a. Advanced Inorganic Chemistry. Spring 2012. Jeffrey K. Nagle.
Inorganic chemistry is incredibly diverse and wide-ranging in scope. Symmetry, spectroscopy, and quantum-based theories and computational methods are employed to gain insight into the molecular and electronic structures and reaction mechanisms of inorganic compounds. Examples from the current literature emphasized, including topics in inorganic photochemistry and biochemistry. Chemistry 252 is recommended.

Prerequisite: Chemistry 240 or permission of the instructor.
401a-404a. Advanced Independent Study and Honors in Chemistry. The Department.
Advanced version of Chemistry 291-294. Students are expected to demonstrate a higher level of ownership of their research problem and to have completed at least four of the 200 -level courses required for the major.

## Classics

Barbara Weiden Boyd, Department Chair<br>Tammis L. Donovan, Department Coordinator

Professor: Barbara Weiden Boyd
Associate Professors: James A. Higginbotham, Jennifer Clarke Kosak $\dagger$
Assistant Professor: Robert B. Sobak $\dagger$
Visiting Faculty: Michael Nerdahl, Cassandra Borges, Jorge Bravo, Stephen O'Connor

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 on a graded basis (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 are to be chosen from offerings in Greek and Latin and should include at least two courses in Greek or Latin at the 300 level. Of the remaining courses, one should be chosen from Archaeology 101 (same as Art History 209) or 102 (same as Art History 210), one should be chosen from Classics 101 or 102, and one should be chosen from Classics 211 (same as History 201) or 212 (same as History 202). Of the courses a student wishes to count towards the major, at least one at the 300 level should be 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. Research seminars may include Archaeology 306; Classics 309; Greek 305; Latin 307, 312.

## Classical Archaeology

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

## Requirements for the Major in Classical Archaeology

The major in classical archaeology consists of ten courses. At least five of the ten courses are to be chosen from offerings in archaeology, and should include Archaeology 101 (same as Art History 209), 102 (same as Art History 210), and at least one archaeology course at the 300 level. In addition, students must complete at least four semesters of Latin or three semesters of Greek. 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. Research seminars may include Archaeology 306; Classics 309; Greek 305; Latin 307, 312.

## 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.

## Requirements for the Major in Classical Studies

The major in classical studies consists of ten courses. At least eight courses must be selected from within the department. A minimum of three courses should be elected in a single ancient language (Greek or Latin). The appropriate level depends on the student's preparation and is determined by the department. The remaining classes should include Classics 101, 102, 211 (same as History 201), and 212 (same as History 202); at least one course in classical archaeology; at least one and not more than two classes outside the Department of Classics and chosen from the following (or from other appropriate offerings in these disciplines, with classics department approval): Anthropology 102 or 221; Art History 213 or 215; Government 240; Philosophy 111; Religion 215 or 216; English 106 (same as Theater 106); and at least two advanced courses in the department at the 300 level, one of which must be a designated research seminar. 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. Research seminars may include Archaeology 306; Classics 309; Greek 305; Latin 307, 312.

## Interdisciplinary Major

The department participates in an interdisciplinary program in archaeology and art history. See page 197.

## Requirements for the Minor

Students may choose a minor in one of five areas:

1. Greek: Five courses in the department, including at least four in the Greek language;
2. Latin: Five courses in the department, including at least four in the Latin language;
3. Classics: Five courses in the department, including at least four in the classical languages; of these four, one should be either Greek 204 or a Latin course at the 300 level;
4. Archaeology: Six courses in the department, including either Archaeology 101 (same as Art History 209) or 102 (same as Art History 210), one archaeology course at the 300 level, 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 101 (same as Art History 209); one of the following: Classics 11 (or any other appropriate first-year seminar), Classics 101, 102, or 211 (same as History 201); or Philosophy 111; or Government 240; and two of the following: Archaeology 203 or any 300-level archaeology course focusing primarily on Greek material; Classics 291-294 (Independent Study) or any 200- or 300-level Greek or classics course focusing primarily on Greek material.
b. -for the Roman studies concentration: two courses in the Latin language; Archaeology 102 (same as Art History 210); one of the following. Classics 18 (or any other appropriate first-year seminar), Classics 101, 102, or 212 (same as History 202); or Philosophy 111; or Government 240; and two of the following: Archaeology 202 or any 300 -level archaeology course focusing primarily on Roman material; or Classics 291-294 (Independent Study) or any 200- or 300-level Latin or classics course focusing primarily on Roman material.
Other courses in the Bowdoin curriculum may be applied to this minor if approved by the classics department.

## Classics and Archaeology at Bowdoin and Abroad

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

## Archaeology

Archaeology 101 and 102 are offered in alternate years.
101c. Introduction to Greek Art and Archaeology. Fall 2011. Jorge Bravo.
Introduces the techniques and methods of classical archaeology as revealed through an examination of Greek material culture. Emphasis upon the major monuments and artifacts of the Greek world from prehistory to the Hellenistic age. Architecture, sculpture, fresco painting, and other "minor arts" are examined at such sites as Knossos, Mycenae, Athens, Delphi, and Olympia. Considers the nature of this archaeological evidence and the relationship of classical archaeology to other disciplines such as art history, history, and classics. Assigned reading supplements illustrated presentations of the major archaeological finds of the Greek world. (Same as Art History 209.)
102c. Introduction to Roman Archaeology. Fall 2012. Jorge Bravo.
Surveys the material culture of Roman society, from Italy's prehistory and the origins of the Roman state through its development into a cosmopolitan empire, and concludes with the fundamental reorganization during the late third and early fourth centuries of our era. Lectures explore ancient sites such as Rome, Pompeii, Athens, Ephesus, and others around

## Courses of Instruction

the Mediterranean. Emphasis upon the major monuments and artifacts of the Roman era: architecture, sculpture, fresco painting, and other "minor arts." Considers the nature of this archaeological evidence and the relationship of classical archaeology to other disciplines such as art history, history, and classics. Assigned reading supplements illustrated presentations of the major archaeological finds of the Roman world. (Same as Art History 210.)

103c. Egyptian Archaeology. Spring 2012. James Higginbotham.
Introduces the techniques and methods of archaeology through an examination of Egyptian material culture. Emphasis placed upon understanding the major monuments and artifacts of ancient Egypt from the prehistoric cultures of the Nile Valley through the period of Roman control. Architecture, sculpture, fresco painting, and other minor arts examined at sites such as Saqqara, Giza, Thebes, Dendera, Tanis, and Alexandria. Considers the nature of this archaeological evidence, its context, and the relationship of archaeology to other disciplines such as art history, anthropology, history, and classics. Themes include the origins and development of complex state systems, funerary symbolism, foreign contacts, and the expression of social, political and religious ideologies in art and architecture. Selected readings supplement illustrated presentations of the major archaeological finds of Egypt. Class meetings include artifact sessions in the Bowdoin College Museum of Art.

## [201c. Archaeology of the Hellenistic World.]

## [202c - ESD, IP. Augustan Rome. (Same as Classics 202.)]

210c. Sport and Athletics in the Greco-Roman World. Spring 2012. Jorge Bravo.
From Homeric Greece to the Roman Empire, exercise of the body and physical competition played varying roles in Greco-Roman culture, whether regarded as a form of excellence or exciting entertainment. Examines the literary and artifactual evidence for these physical pursuits in classical antiquity with the aim of understanding their nature and their relation to other aspects of society and culture such as politics, religion, education, art, warfare, and gender and sexuality. Their relation to the modern experience of sports also considered, most notably the modern Olympic Games, next scheduled to take place in summer 2012. (Same as Classics 216.)

At least one 300 -level archaeology course is offered each year. Topics and/or periods recently taught on this level include the Greek Bronze Age, Etruscan art and archaeology, Greek and Roman numismatics, and Pompeii and the cities of Vesuvius. The 300 -level courses currently scheduled are:

## [303c. Ancient Art in the Making.]

## [304c. Pompeii and the Cities of Vesuvius.]

306c. Archaeology of the Greek Hero. Spring 2012. Jorge Bravo.
From the well-known heroes of epic like Achilles and Odysseus to more obscure figures such as the child hero Opheltes or the nameless heroines of inscribed cult calendars, heroes occupied an important place in the lives, experiences, and ideology of the ancient Greeks. Explores the ancient Greek hero as a figure of both cult and myth primarily as expressed in the surviving material culture of antiquity. Material examined includes archaeological sites identified with the worship of heroes, votive objects from their cult, inscriptions, and artistic representations ranging from public monuments to private drinking cups. Explores topics including the nature of hero worship, the heroes' ambiguous relation to morality and virtue,
their role in the formation of the identity of communities and Greek culture more generally, and the Greeks' conceptualization of their past.

Prerequisite: Archaeology 101 or 102, or permission of the instructor.
[308c. The Fall of Rome?]

## Classics

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
[11c. Shame, Honor, and Responsibility.]
12c. Discovering Homer. Fall 2011. Cassandra Borges.
[18c. Cleopatra: Versions and Visions.]

## Introductory, Intermediate, and Advanced Courses

Classics 101 and 102 are offered in alternate years.
101c - ESD, IP. Classical Mythology. Spring 2012. Michael Nerdahl.
Focuses on the mythology of the Greeks and the use of myth in classical literature. Other topics considered are recurrent patterns and motifs in Greek myths; a cross-cultural study of ancient creation myths; the relation of mythology to religion; women's roles in myth; and the application of modern anthropological, sociological, and psychological theories to classical myth. Concludes with an examination of Ovid's use of classical mythology in the Metamorphoses.
102c - ESD, IP. Introduction to Ancient Greek Culture. Spring 2013. Jennifer Clarke Kosak.

Introduces students to the study of the literature and culture of ancient Greece. Examines different Greek responses to issues such as religion and the role of gods in human existence, heroism, the natural world, the individual and society, and competition. Considers forms of Greek rationalism, the flourishing of various literary and artistic media, Greek experimentation with different political systems, and concepts of Hellenism and barbarism. Investigates not only what we do and do not know about ancient Greece, but also the types of evidence and methodologies with which we construct this knowledge. Evidence is drawn primarily from the works of authors such as Homer, Sappho, Herodotus, Aeschylus, Sophocles, Euripides, Thucydides, Aristophanes, Plato, and Hippocrates, but attention is also given to documentary and artistic sources. All readings are done in translation.
[202c - ESD, IP. Augustan Rome. (Same as Archaeology 202.)]

## 211c - ESD. History of Ancient Greece: Bronze Age to the Death of Alexander. Fall 2011. Stephen O'Connor.

Surveys the history of Greek-speaking peoples from the Bronze Age (c. 3000-1100 B.C.E.) to the death of Alexander the Great in 323 B.C.E. Traces the political, economic, social, religious, and cultural developments of the Greeks in the broader context of the Mediterranean world. Topics include the institution of the polis (city-state); hoplite warfare; Greek colonization; the origins of Greek "science," philosophy, and rhetoric; and fifth-century Athenian democracy and imperialism. Necessarily focuses on Athens and Sparta, but attention is also given to

## Courses of Instruction

the variety of social and political structures found in different Greek communities. Special attention is given to examining and attempting to understand the distinctively Greek outlook in regard to gender, the relationship between human and divine, freedom, and the divisions between Greeks and barbarians (non-Greeks). A variety of sources-literary, epigraphical, archaeological-are presented, and students learn how to use them as historical documents. (Same as History 201.)

Note: This course fulfills the pre-modern requirement for history majors.
[212c. Ancient Rome. (Same as History 202.)]
213c. War and Society in the Ancient Greek World. Spring 2012. Stephen O’Connor.
Explores the dynamic relationship between the changing ways in which archaic and classical Greek societies were structured, and the ways in which the Greeks organized themselves for and conducted warfare. Examines the specifics of military organization and fighting as well as broader issues such as the causes and goals of Greek warfare, the role of ideology in determining representations of military conflicts, and the economic framework of Greek wars. Focuses especially on the current controversy concerning the origins and development of hoplite (Greek heavy infantry) warfare and its role in shaping the institutions of the Greek polis (city-state), and how we can use our archeological, iconographic, and literary sources to reconstruct the realities of hoplite battle. Concludes by investigating to what extent ancient Greek infantry warfare, with its emphasis on close-order shock combat, has provided a model for Western warfare to this day. (Same as History 206.)

216c. Sport and Athletics in the Greco-Roman World. Spring 2012. Jorge Bravo.
From Homeric Greece to the Roman Empire, exercise of the body and physical competition played varying roles in Greco-Roman culture, whether regarded as a form of excellence or exciting entertainment. Examines the literary and artifactual evidence for these physical pursuits in classical antiquity with the aim of understanding their nature and their relation to other aspects of society and culture such as politics, religion, education, art, warfare, and gender and sexuality. Their relation to the modern experience of sports also considered, most notably the modern Olympic Games, next scheduled to take place in summer 2012. (Same as Archaeology 210.)
[225c. Immorality and Political Revolution in Ancient Rome. (Same as History 206.)]
[241c - IP. The Transformations of Ovid.]
[305c. Leisure, Class, and "The Liberal Arts" in Ancient Greece.]
309c - IP. Ancient Epic: Tradition, Authority, and Intertextuality. Fall 2011. Barbara Weiden Boyd.

Begins with reading and close analysis of the three foundational epic poems of classical antiquity, Homer's Iliad and Odyssey and Virgil's Aeneid, and then moves on to selections from several of the "successor" epics, including Apollonius' Argonautica, Ovid's Metamorphoses, Lucan's Pharsalia, and Statius' Thebaid. Discussion of the ancient poems complemented by an ongoing examination of central issues in contemporary criticism of classical texts, including the relationship of genre, ideology, and interpretation; the tension between literary tradition and authorial control; and the role of intertextuality in establishing a dialogue between and
among these poems and their poets. All readings are in English, and no familiarity with Greek or Latin is required.

Prerequisite: One of the following: Classics 101, 102, 211, or 211, Greek 101, Latin 101, or permission of the instructor.
[312c. Ancient Greek Medicine.]

## Greek

## 101c. Elementary Greek I. Spring 2012. Barbara Weiden Boyd.

Introduces students to basic elements of ancient Greek grammar and syntax; emphasizes the development of reading proficiency and includes readings, both adapted and in the original, of various Greek authors. Focuses on Attic dialect.

102c. Elementary Greek II. Fall 2011. Barbara Weiden Boyd.
A continuation of Greek 101; introduces students to more complex grammar and syntax, while emphasizing the development of reading proficiency. Includes readings, both adapted and in the original, of Greek authors such as Plato and Euripides. Focuses on Attic dialect.

203c. Intermediate Greek for Reading. Every spring. Spring 2012. Cassandra Borges.
A review of the essentials of Greek grammar and syntax and an introduction to the reading of Greek prose through the study of one of Plato's dialogues. Equivalent of Greek 102 or two to three years of high school Greek is required.

204c - IP. Homer. Fall 2012. The Department.
An introduction to the poetry of Homer. Focuses both on reading and on interpreting Homeric epic.

At least one advanced Greek course is offered each year. The aim of each of these courses is to give students the opportunity for sustained reading and discussion of at least one major author or genre representative of classical Greek literature. Primary focus is on the texts, with serious attention given as well both to the historical context from which these works emerged and to contemporary discussions and debates concerning these works.

Department faculty generally attempt to schedule offerings in response to the needs and interests of concentrators. Topics and/or authors frequently taught on this level include Greek lyric and elegiac poetry; Homer's Odyssey; Greek drama (including the tragedies of Aeschylus, Sophocles, and Euripides, and the comedies of Aristophanes and Menander); Greek history (including Herodotus and Thucydides); Greek philosophy (including Plato and Aristotle); Greek rhetoric and oratory; and the literature of the Alexandrian era.

## [303c. The Historians.]

[304c. Greek Comedy.]
305c. Tragedy. Fall 2011. Stephen O'Connor.

## Latin

101c. Elementary Latin I. Every fall. Fall 2011. Michael Nerdahl.
A thorough presentation of the elements of Latin grammar. Emphasis is placed on achieving a reading proficiency.

102c. Elementary Latin II. Every spring. Spring 2012. Michael Nerdahl.
A continuation of Latin 101. During this term, readings are based on unaltered passages of classical Latin.

## 203c. Intermediate Latin for Reading. Every fall. Fall 2011. Jorge Bravo.

A review of the essentials of Latin grammar and syntax and an introduction to the reading of Latin prose and poetry. Materials to be read change from year to year, but always include a major prose work. Equivalent of Latin 102 or two to three years of high school Latin is required.

204c - IP. Studies in Latin Literature. Every spring. Spring 2012. Stephen O'Connor.
An introduction to different genres and themes in Latin literature. The subject matter and authors covered may change from year to year (e.g., selections from Virgil's Aeneid and Livy's History, or from Lucretius, Ovid, and Cicero), but attention is always given to the historical and literary context of the authors read. While the primary focus is on reading Latin texts, some readings from Latin literature in translation are also assigned. Equivalent of Latin 203 or three to four years of high school Latin is required.

One advanced Latin course is offered each semester. The aim of each of these courses is to give students the opportunity for sustained reading and discussion of at least one major author or genre representative of classical Latin literature. Primary focus is on the texts, with serious attention given as well both to the historical context from which these works emerged and to contemporary discussions and debates concerning these works.

Department faculty generally attempt to schedule offerings in response to the needs and interests of concentrators. Topics and/or authors frequently taught on this level include Roman history (including Sallust, Livy, and Tacitus); Ovid's Metamorphoses, Elegiac poetry; Cicero's oratory; Virgil's Aeneid or Eclogues and Georgics, Roman novel (including Petronius and Apuleius); satire; and comedy (including Plautus and Terence). The 300 -level courses currently scheduled are:
[301c - IP. Livy.]

## [302c. Ovid's Metamorphoses.]

307c - IP. Young Virgil. Spring 2012. Barbara Weiden Boyd.
Born in 70 B.C.E., the poet Virgil (Publius Vergilius Maro) lived through the traumatic decades that saw the end of the Roman republic, and witnessed firsthand the political rebirth of Rome managed by Octavian after the battle of Actium. Virgil's Aeneid, written in the first decade of the "restored Republic," reflects both the historical turmoil of the time and its outcome; his earlier works, however, written during fifteen yeats of political uncertainty and great personal danger, offer a somewhat different perspective on the period, as well as providing insight into the nature of a poetic career in antiquity. Begins with Virgil's Eclogues, the pastoral collection that established the poet's reputation and attracted powerful patrons; then moves to selections from the Georgics, in which farming serves as a didactic metaphor for both government-good and bad-and human experience of the cosmos, and to selections from a number of other contemporary poems falsely ascribed (since antiquity) to Virgil and supposedly representing his earliest work. Research seminar; Latin readings will be complemented by an introduction to and exploration of recent scholarly discussions of Virgil's early work.
[310c - IP. Catullus.]

312c - IP. Roman Tragedy. Fall 2011. Michael Nerdahl.
An introduction to the plays of Seneca the Younger, philosopher and advisor to the Emperor Nero (A.D. 54-68). One or two plays read in Latin and supplemented by the reading of other tragedies, including Seneca's Greek models, in English. This research seminar also looks at the historical context of the plays, issues concerning their performance, the social and political culture of Neronian Rome, and the influence of Seneca's Stoic philosophy on his plays. Research seminar.
[314c. Roman Biography.]

# Independent Study in Archaeology, Classics, Greek, and Latin 

291c-294c. Intermediate Independent Study. The Department.
401c-404c. Advanced Independent Study and Honors. The Department.

## Computer Science

Eric L. Chown, Department Cbair<br>Suzanne M. Theberge, Senior Department Coordinator

Professor: Eric L. Chown<br>Associate Professors: Stephen M. Majercik $\dagger$, Laura I. Toma<br>Assistant Professor: Daniela A. S. de Oliveira

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 network security, cyberattack recovery, geographic information systems, computing with massive data sets, 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 101); Data Structures (Computer Science 210), Algorithms (Computer Science 231), and seven elective courses at the 200 level 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 300 -level courses. Independent studies (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 210 as soon as possible after Computer Science 101, since this course

## Courses of Instruction

is a prerequisite 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 200, 201, 204 (same as Biology 174), 224, 225, 229, 232, 244, 252, 258, and 265.

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 218; Philosophy 210, 223, and 233; Psychology 216 and 270; and Visual Arts 255 (same as Biology 202).

## Requirements for the Minor in Computer Science

The minor consists of five courses: Computer Science 101, Computer Science 210, and any three additional computer science courses at the 200 level or above.

## Interdisciplinary Major

The department participates in an interdisciplinary major program in computer science and mathematics. See page 198.

## Fulfilling Requirements

Courses that satisfy the Algorithms and Theory requirement: Computer Science 289, 340, 345, 350.

Courses that satisfy the Artificial Intelligence requirement: Computer Science 270, 320, 355, 375.
Courses that satisfy the Systems requirement: Computer Science 240, 250, 280, 281, 360, 370.
Courses that satisfy the Projects requirement: Computer Science 240, 280, 281, 320, 340, 345, 350, 360, 370, 375.
To fulfill the major or minor requirements, or to serve as a prerequisite for another computer science course, a grade of C- or better must be earned in a course. Courses taken to fulfill major or minor requirements must be taken on a graded basis (not Credit/D/Fail).

## Introductory, Intermediate, and Advanced Courses

## 50a - MCSR. The Digital World. Spring 2012. Eric Chown.

Explores the means and the results of the digital revolution. How is information coded and stored? How can it be safeguarded? How does the widespread coding and transmission of data impact issues such as privacy and intellectual property? Examines systems such as BitTorrent both from the point of view of how they operate as digital tools, and the implications of their use and misuse.

101a - MCSR. Introduction to Computer Science. Every semester. The Department.
What is computer science, what are its applications in other disciplines, and what is its impact in society? A step-by-step introduction to the art of problem solving using the computer and the Java language. Provides a broad introduction to computer science and programming
through real-life applications. Weekly labs provide experiments with the concepts presented in class. Assumes no prior knowledge of computers or programming.
210a - MCSR. Data Structures. Fall 2011. Laura Toma.
Solving complex algorithmic problems requires the use of appropriate data structures such as stacks, priority queues, search trees, dictionaries, hash tables, and graphs. It also requires the ability to measure the efficiency of operations such as sorting and searching in order to make effective choices among alternative solutions. Offers a study of data structures, their efficiency, and their use in solving computational problems. Laboratory exercises provide an opportunity to design and implement these structures. Students interested in taking Computer Science 210 are required to pass the computer science placement examination before class starts.

Prerequisite: Computer Science 101, or permission of the instructor.
231a - MCSR. Algorithms. Fall 2011. Laura Toma.
An introductory course on the design and analysis of algorithms. Introduces a number of basic algorithms for a variety of problems such as searching, sorting, selection, and graph problems (e.g., spanning trees and shortest paths). Discusses analysis techniques, such as recurrences and amortization, as well as algorithm design paradigms such as divide-and-conquer, dynamic programming, and greedy algorithms.
240a - MCSR. Operating Systems. Fall 2011. Daniela A. S. de Oliveira.
An introduction to operating systems concepts, design, and implementation. Operating systems (OS) are essential to any computer system and, although we have witnessed rapid changes in applications and in the use of computers, the fundamental concepts that underlie an OS remain the same. Students get hands-on experience experimenting with Linux, a real, widely used, open source OS. However, the core concepts are applicable to most operating systems: Windows, OS X, FreeBSD, Solaris. Compares differences in design choices among these other systems. Topics include process management (scheduling, threads, interprocess synchronization, and deadlocks), main memory and virtual memory, file and I/O subsystems, and the basics of OS protection and security.

Prerequisite: Computer Science 210, or permission of the instructor.
250a - MCSR. Principles of Programming Languages. Spring 2013. The Department.
Focuses on different paradigms for solving problems and their representation in programming languages. These paradigms correspond to distinct ways of thinking about problems. For example, functional languages (such as Haskell) focus attention on the behavioral aspects of the real-world phenomena being modeled; logic programming languages (such as Prolog) focus attention on the declarative aspects of problem-solving. Covers principles of language design and implementation including syntax, semantics, type systems, control structures, and compilers.
Prerequisite: Computer Science 210, or permission of the instructor.
270a - MCSR. Artificial Intelligence. Spring 2013. The Department.
Explores the principles and techniques involved in programming computers to do tasks that would require intelligence if people did them. State-space and heuristic search techniques, logic and other knowledge representations, reinforcement learning, neural networks, and other approaches are applied to a variety of problems with an emphasis on agent-based approaches.
Prerequisite: Computer Science 210, or permission of the instructor.

## Courses of Instruction

280a. Projects in Computer Science. Spring 2013. The Department.
Affords students the opportunity to work on large-scale software projects. Most involve the student, or team of students, contributing to an ongoing project. Emphasis placed on how the nature of such work differs from the coursework typically found in a computer science course. Work consists mainly of the projects, but students also required to give regular progress reports and presentations.

Prerequisite: Computer Science 231, or permission of the instructor.

## 281a. Mobile Computing. Fall 2011. Eric Chown.

As computer science enters the "post-PC" era basic computing paradigms are shifting to take advantage of mobile platforms such as phones and tablets. Covers all aspects of programming for mobile devices including development environments, programming languages, the use of touch screens for input, and associated sensors such as accelerometers and GPS. Students engage in a series of introductory projects before taking on a large self-designed term project that highlights the differences between mobile applications and more traditional applications designed for the desktop.

## Prerequisite: Computer Science 210.

289a - MCSR. Theory of Computation. Spring 2013. The Department.
Studies the nature of computation and examines the principles that determine what computational capabilities are required to solve particular classes of problems. Topics include an introduction to the connections between language theory and models of computation, and a study of unsolvable problems.

291a-294a. Intermediate Independent Study in Computer Science. The Department.
320a. Robotics. Fall 2011. Eric Chown.
Robotics is a challenging discipline that encourages students to apply theoretical ideas from a number of different areas-artificial intelligence, cognitive science, operations research-in pursuit of an exciting, practical application: programming robots to do useful tasks. Two of the biggest challenges are building effective models of the world using inaccurate and limited sensors, and using such models for efficient robotic planning and control. Addresses these problems from both a theoretical perspective (computational complexity and algorithm development) and a practical perspective (systems and human/robot interaction) through multiple programming projects involving simulated and actual robots.

Prerequisite: Computer Science 210, or permission of the instructor.

## 340a. Spatial Data Structures. Spring 2013. Laura Toma.

In many disciplines the data being collected is spatial-that is, it has geometric coordinates. Computing on spatial data is a fast-moving area of research in computer science with applications, ranging from robotics and computer graphics to environmental science, physics (finite-element analysis), engineering (computer-aided design), and biology (bioinformatics). Explores fundamental data structures on spatial data, such as the B-tree, quad-tree, kd-tree, range tree, BSP tree, R-tree; and how they can be used to address basic problems like range and containment queries, nearest neighbor queries, segment intersection, point location, ray tracing, and visibility. Discusses the data structures from a theory and practical point of view, emphasizing the underlying paradigms, the trade-offs (time-space, theory-practice), and the CPU, and IO performance.

Prerequisite: Computer Science 210 and 231, or permission of the instructor.

# 345a. When RAM Is Not Enough: Computing with Massive Data Sets. Spring 2014. 

 Laura Toma.The traditional measure of an algorithm's efficiency-number of instructions performedassumes that all the data fits in main memory. Massive data sets, which are becoming more common and do not fit into main memory, have led to a new measure that takes into account disk accesses, which are orders of magnitude slower than main memory accesses and usually dominate the running time. IO-efficient algorithms try to minimize both the number of instructions and the number of disk accesses. Covers basic algorithms and data structures, techniques and paradigms, and applications. Looks at examples where IO-efficient algorithms make a difference in practice, and the extent of this difference. Consists of lectures, paper reading and presentation, and programming projects.
Prerequisite: Computer Science 210 and 231, or permission of the instructor.
350a. A Computing Perspective of GIS. Spring 2012. Laura Toma.
Geographic Information Systems (GIS) are computer systems for storing, displaying, and analyzing geographically referenced, or geospatial, data. Using GIS one can keep track of the location of objects such as boundaries, rivers, roads, cities, railways; determine the closest public hospital; find the areas susceptible to flooding or erosion; track the position of a car on a map; or find the shortest route from one location to another. For computer scientists, GIS is a rich source of problems spanning from theory and algorithm engineering to databases, networks, and systems. Gives a computing perspective of GIS and presents the basic problems encountered in designing GIS: data models, representation, basic algorithms, and algorithm optimization.
Prerequisite: Computer Science 210 and 231, or permission of the instructor.
355a. Cognitive Architecture. Fall 2012. Eric Chown.
Advances in computer science, psychology, and neuroscience have shown that humans process information in ways that are very different from those used by computers. Explores the architecture and mechanisms that the human brain uses to process information. In many cases, these mechanisms are contrasted with their counterparts in traditional computer design. A central focus is to discern when the human cognitive architecture works well, when it performs poorly, and why. Conceptually oriented, drawing ideas from computer science, psychology, and neuroscience. No programming experience necessary.
Prerequisite: One of the following: Computer Science 231 or 250, Biology 214 or 253, or Psychology 270, or permission of the instructor.
360a. Computer and Network Security. Spring 2013. Daniela A. S. de Oliveira.
Millions of people use the Internet in many important activities of their lives, but many of them are using software/hardware that is not secure. Students learn the principles, mechanisms, and implementation of computer security and data protection, attackers' motivations, how real attacks work and how to defend against them, and how to design more secure systems. Opportunities to perform and analyze real attacks in a controlled environment. Topics include computer security and principles, malicious software (e.g., worms, rootkits, botnets, Trojans, viruses), intrusion detection, network security, Web security, access control matrices, confidentiality and integrity policies, design principles, access control mechanisms, information flow, and cryptography as a security tool.

Prerequisite: Computer Science 210, or permission of the instructor.

## Courses of Instruction

370a. Computer Networks. Spring 2012. Daniela A. S. de Oliveira.
Computer networks are everywhere: e-mail, the Web, wireless networks, mobile devices, networked sensors, satellite communication, peer-to-peer applications. New applications based on networks appear constantly. Provides an introduction to the exciting field of computer networks by taking a top-down approach. Begins with an overview of computer networks, hardware and software components, the Internet, and the concept of protocols and layered service. Delves into details about the four main layers making up the computer network stack: Application (HTTP, FTP, e-mail, DNS, peer-to-peer applications and socket programming), Transport (TCP, UDP, and congestion control), Network (IP, routers, and routing algorithms) and Link Layer and Local Area Networks (medium access control, switches, and Ethernet). Also covers wireless and mobile networks (CDMA, WiFi, cellular Internet access, mobile IP, and managing mobility).

Prerequisite: Computer Science 210, or permission of the instructor.
375a. Optimization and Uncertainty. Spring 2013. Stephen Majercik.
Optimization problems and the need to cope with uncertainty arise frequently in the real world. A numeric framework, rather than the symbolic one of traditional artificial intelligence, is useful for expressing such problems. In addition to providing a way of dealing with uncertainty, this approach sometimes permits performance guarantees for algorithms. Topics include constraint satisfaction, systematic and non-systematic search techniques, probabilistic inference and planning, and population-based optimization techniques (e.g., genetic algorithms and ant colony optimization).

Prerequisite: Computer Science 210, or permission of the instructor.
401a-404a. Advanced Independent Study and Honors in Computer Science. The Department.

## Earth and Oceanographic Science

Collin S. Roesler, Department Cbair
Marjorie L. Parker, Department Coordinator
Professor: Rachel J. Beane
Associate Professors: Philip Camill (Environmental Studies), Edward P. Laine, Peter D. Lea $\dagger$, Collin S. Roesler
Assistant Professor: Emily M. Peterman
Visiting Faculty: Gabrielle C. L. David
Laboratory Instructors: Cathryn Field, Joanne Urquhart

## Requirements for the Major in Earth and Oceanographic Science

The major consists of ten courses. Majors may begin their study with any one of the introductory earth and oceanographic science courses: Earth and Oceanographic Science 101, 102 (same as Environmental Studies 102), 103 (same as Environmental Studies 103), or 104 (same as Environmental Studies 104). Majors are required to take Earth and Oceanographic Science 200 (same as Environmental Studies 200), and any one of the
following: Biology 102 or 109, or Chemistry 109, or Physics 104, or Math 181. To establish breadth within the major, students must take one core course from each of the following three areas:

1. Solid Earth (Earth and Oceanographic Science 241, 262, or 265)
2. Earth Surface Processes (Earth and Oceanographic Science 220 or $\mathbf{2 7 0}$ [same as Environmental Studies 270])
3. Oceans (Earth and Oceanographic Science 250, 267 [same as Environmental Studies 267], or 282 [same as Environmental Studies 282], or 287 [same as Environmental Studies 287])

In addition, majors are required to take at least one research-experience course (Earth and Oceanographic Science 314 or 315), and one senior seminar (Earth and Oceanographic Science 302 [same as Biology 302 and Environmental Studies 302] or 343 [same as Environmental Studies 343]). The remaining elective courses may be selected from earth and oceanographic science courses at the 200 or 300 level. One of these electives may include Biology 219 (same as Environmental Studies 219), 225 (same as Environmental Studies 225), 271 (same as Environmental Studies 271), 274 (same as Environmental Studies 274); Chemistry 205 (same as Earth and Oceanographic Science 205 and Environmental Studies 205), 305 (same as Environmental Studies 305), 350 (same as Environmental Studies 350); Computer Science 350; Environmental Studies 204; Physics 251, 262, 257 (same as Earth and Oceanographic Science 257 and Environmental Studies 253), 357 (same as Earth and Oceanographic Science 357 and Environmental Studies 357); or an approved off-campus study or summer field course.

Note that (a) only one of Earth and Oceanographic Science 101, 102 (same as Environmental Studies 102), 103 (same as Environmental Studies 103), or 104 (same as Environmental Studies 104) may be counted toward the major requirements; (b) students may opt to begin the major with Earth and Oceanographic Science 200 (same as Environmental Studies 200) having previously taken Biology 102 or 109, or Chemistry 109. Such students may substitute a 200 -level earth and oceanographic science course or research-experience course (Earth and Oceanographic Science 314 [same as Environmental Studies 314] or 315) for Earth and Oceanographic Science 101, 102 (same as Environmental Studies 102), 103 (same as Environmental Studies 103), or 104 (same as Environmental Studies 104); (c) only one of Earth and Oceanographic Science 302 (same as Biology 302 and Environmental Studies 302) or 343 (same as Environmental Studies 343) may be counted toward the major requirements; (d) independent studies do not count toward the major requirements; and (e) 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 participates in a formal interdisciplinary program in earth and oceanographic science and physics. See page 198.

## Requirements for the Minor in Earth and Oceanographic Science

The minor consists of four courses in the department. Minors are required to take Earth and Oceanographic Science 200 (same as Environmental Studies 200). No more than one introductory course (Earth and Oceanographic Science 101, 102 [same as Environmental Studies 102], 103 [same as Environmental Studies 103], or 104 [same as Environmental Studies 104]) may be included. All courses counted toward the minor must be completed with a C- or better.

## Introductory, Intermediate, and Advanced Courses

50a - INS. Earthquakes and Volcanoes. Fall 2011. Edward Laine.
Introduction to the basic plate-tectonic structure of the earth and its relationship to the global distribution and types of earthquakes and volcanoes. Exploration of the factors contributing to the origin and styles of eruption of magma from volcanoes. Examination of the history and nature of tsunamis and the volcanic, seismic, and other events that can trigger them. Consideration of the human response to these and other geological hazards and efforts to mitigate them.

101a - INS. Investigating Earth. Every fall. Fall 2011. Rachel Beane.
Dynamic processes, such as earthquakes and volcanoes, shape the earth on which we live. In-class lectures and exercises examine these processes from the framework of plate tectonics. Weekly field trips explore rocks exposed along the Maine coast. During the course, students complete a research project on Maine geology.

102a - INS. Introduction to Oceanography. Every spring. Collin Roesler.
The fundamentals of geological, physical, chemical, and biological oceanography: tectonic evolution of the ocean basins, ocean circulation, chemical cycles, primary production and trophodynamics and the oceans' role in climate change. Weekly labs will apply the principles in the setting of Casco Bay and the Gulf of Maine. (Same as Environmental Studies 102.)
104a - MCSR, INS. Environmental Geology and Hydrology. Every spring. Spring 2012. Gabrielle David.

An introduction to aspects of geology and hydrology that affect the environment and land use. Topics include lakes, watersheds and surface-water quality, groundwater contamination, coastal erosion, and landslides. Weekly labs and field trips examine local environmental problems affecting Maine's rivers, lakes, and coast. Students complete a community-based research project on Maine water quality. Formerly Geology 100 (same as Environmental Studies 100). (Same as Environmental Studies 104.)

200a. Biogeochemistry: An Analysis of Global Change. Every fall. Philip Camill.
Understanding global change requires knowing how the biosphere, geosphere, oceans, ice, and atmosphere interact. An introduction to earth system science, emphasizing the critical interplay between the physical and living worlds. Key processes include energy flow and material cycles, soil development, primary production and decomposition, microbial ecology and nutrient transformations, and the evolution of life on geochemical cycles in deep time. Terrestrial, wetland, lake, river, estuary, and marine systems are analyzed comparatively. Applied issues are emphasized as case studies, including energy efficiency of food production, acid rain impacts on forests and aquatic systems, forest clearcutting, wetland delineation, eutrophication of coastal estuaries, ocean ferrilization, and global carbon sinks. (Same as Environmental Studies 200.)

Prerequisite: One of the following: Earth and Oceanographic Science 101, 102 (same as Environmental Studies 102), 103 (same as Environmental Studies 103), or 104 (same as Environmental Studies 104) [formerly Geology 100 (same as Environmental Studies 100)]; Biology 102 or 109 ; or Chemistry 102 or 109.
220a - INS. Sedimentary Systems. Every other spring. Spring 2013. The Department. Investigates modern and ancient sedimentary systems, both continental and marine, with emphasis on the dynamics of sediment transport, interpretation of depositional environments from sedimentary structures and facies relationships, stratigraphic techniques for interpreting earth history, and tectonic and sea-level controls on large-scale depositional patterns. Weekend trip to examine Devonian shoreline deposits in the Catskill Mountains in New York is required.

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
241a - INS. Structural Geology. Fall 2011. Rachel Beane.
Geologic structures yield evidence for the dynamic deformation of the earth's crust. Examines deformation at scales that range from the plate-tectonic scale of the Appalachian mountains to the microscopic scale of individual minerals. A strong field component provides ample opportunity for describing and mapping faults, folds, and other structures exposed along the Maine coast. In-class exercises focus on problem-solving through the use of geologic maps, cross-sections, stereographic projections, strain analysis, and computer applications.

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
250a - INS. Marine Geology. Fall 2011. Edward Laine.
The geological and geophysical bases of the plate-tectonic model. The influence of plate tectonics on major events in oceanographic and climatic evolution. Deep-sea sedimentary processes in the modern and ancient ocean as revealed through sampling and remote sensing. Focus in the laboratory on the interpretation of seismic reflection profiles from both the deep ocean and local coastal waters.

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
257a. Atmosphere and Ocean Dynamics. Fall 2011. Mark Battle.
A mathematically rigorous analysis of the motions of the atmosphere and oceans on a variety of spatial and temporal scales. Covers fluid dynamics in inertial and rotating reference frames, as well as global and local energy balance, applied to the coupled ocean-atmosphere system. (Same as Environmental Studies 253 and Physics 257.)

Prerequisite: Physics 104 or permission of the instructor.
262a. Petrotectonics. Every other fall. Fall 2012. Rachel Beane.
Exploration of the processes by which igneous rocks solidify from magma (e.g., volcanoes), and metamorphic rocks form in response to pressure, temperature, and chemical changes (e.g., mountain building). Interactions between the petrologic processes and tectonics are examined through a focus on the continental crust, mid-ocean ridges, and subduction zones. Learning how to write effectively is emphasized throughout the course. Laboratory work focuses on field observations, microscopic examination of thin sections, and geochemical modeling. Earth and Oceanographic Science 101, 200, or 202 is recommended.

Prerequisite: One course in earth and oceanographic science.
[265a - INS. Geophysics.]

## Courses of Instruction

267a - INS. Coastal Oceanography. Spring 2012. Edward Laine.
Principles and problems in coastal oceanography, with an emphasis on interdisciplinary inquiry. Topics include circulation and sediment transport within estuaries and on the continental shelf, impact of human systems on the marine environment, and issues and controversies of eutrophication and hypoxia in the coastal environment. (Same as Environmental Studies 267.)

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
270a. Landscapes and Global Change. Every other spring. Spring 2012. Gabrielle David.
The earth's surface is marked by the interactions of the atmosphere, water and ice, biota, tectonics, and underlying rock and soil. Even familiar landscapes beget questions on how they formed, how they might change, and how they relate to patterns at both larger and smaller scales. Examines earth's landscapes and the processes that shape them, with particular emphasis on how future changes may both influence and be influenced by humans. Topics include specific land-shaping agents (rivers, glaciers, landslides, groundwater), as well as how these agents interact with one another and with changing climate, tectonics, and human activities. (Same as Environmental Studies 270.)

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
282a - MCSR, INS. Oceans and Climate. Every third fall. Fall 2012. Collin Roesler.
Oceans cover more than 70 percent of the earth's surface. Through the transfer of heat and matter, the oceans drive earth's climate and ultimately life on earth. Students will learn how records of paleoclimates are preserved in deep-sea sediments and glacial ice cores and how natural climate variations can be distinguished from human induced changes. The role of the ocean in buffering increasing heat and carbon in the atmosphere and ocean ecosystem responses to climate perturbations will be explored. Weekly laboratory sessions will be devoted to field trips, laboratory experiments, and computer-based data analysis and modeling to provide hands-on experiences for understanding the time and spaces scales of processes governing oceans, climate, and ecosystems. Earth and Oceanographic Science 200 and Mathematics 161 are recommended. (Same as Environmental Studies 282.)

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
287a. Poles Apart: A Comparison of Arctic and Antarctic Environments. Every third fall. Fall 2011. Collin Roesler.

Compares and contrasts the geography, climate, glaciology and sea ice, oceanography, ocean biology, and exploration history of the Arctic and Antarctic regions with particular emphasis on the role of polar regions in global climate change. One weekend field trip required. (Same as Environmental Studies 287.)

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
291a-294a. Intermediate Independent Study in Earth and Oceanographic Science. The Department.
302a. Earth Climate History and Its Impacts on Ecosystems and Human Civilizations. Spring 2012. Philip Camill.

The modern world is experiencing rapid climate warming and some parts extreme drought, which will have dramatic impacts on ecosystems and human societies. How do contemporary warming and aridity compare to past changes in climate over the last billion years? Are modern
changes human-caused or part of the natural variability in the climate system? What effects did past changes have on global ecosystems and human societies? Students use environmental records from rocks, soils, ocean cores, ice cores, lake cores, fossil plants, and tree rings to assemble proxies of past changes in climate, atmospheric $\mathrm{CO}_{2}$, and disturbance to examine several issues: long-term carbon cycling and climate, major extinction events, the rise of C4 photosynthesis and the evolution of grazing mammals, orbital forcing and glacial cycles, glacial refugia and post-glacial species migrations, climate change and the rise and collapse of human civilizations, climate/overkill hypothesis of Pleistocene megafauna, climate variability, drought cycles, climate change impacts on disturbances (fire and hurricanes), and determining natural variability vs. human-caused climate change. One introductory biology (with ecology or evolution focus), chemistry, or earth and oceanographic science course is required. Prior enrollment in a 200 - level ecology or earth and oceanographic science course is recommended. (Same as Biology 302 and Environmental Studies 302.)

315a. Mineral Science. Spring 2012. Rachel Beane.
Minerals are the earth's building blocks and an important human resource. The study of minerals provides information on processes that occur within the earth's core, mantle, crust, and at its surface. At the surface, minerals interact with the hydrosphere, atmosphere and biosphere, and are essential to understanding environmental issues. Minerals and mineral processes examined using hand-specimens, crystal structures, chemistry, and microscopy. Class projects emphasize mineral-based research.

Prerequisite: Earth and Oceanographic Science 200 (same as Environmental Studies 200) or 262 , or Chemistry 240 or 251 , or Physics 251 , or permission of the instructor.
343a. Tectonics and Climate. Every other spring. Spring 2013. Rachel Beane.
Exploration of the complex interactions between tectonics and climate. Discussion of current research is emphasized by reading primary literature, through class discussions and presentations, and by writing scientific essays. The emphasis on current research means topics may vary, but will include topographic growth of mountain belts and Cenozoic climate change. (Same as Environmental Studies 343.)

Prerequisite: One 200 -level course in earth and oceanographic science or Earth and Oceanographic Science 357 (same as Environmental Studies 357 and Physics 357).
[357a. The Physics of Climate. (Same as Environmental Studies 357 and Physics 357.)]
401a-404a. Advanced Independent Study and Honors in Earth and Oceanographic Science. The Department.

# Economics 

Rachel Ex Connelly, Department Cbair<br>Elizabeth Weston, Department Coordinator

Professors: Rachel Ex Connelly, Deborah S. DeGraff, John M. Fitzgerald, Jonathan P. Goldstein, B. Zorina Khan

Associate Professors: Gregory P. DeCoster, Guillermo Herrera $\dagger$
Assistant Professors: Paola Boel, Julián P. Díaz, Stephen J. Meardont, Erik Nelson, Yao Tang

The major in economics is designed for students who wish to obtain a systematic introduction to the basic theoretical and empirical techniques of economics. It provides an opportunity to learn economics as a social science with a core of theory, to study the process of drawing inferences from bodies of data and testing hypotheses against observation, and to apply economic theory to particular social problems. Such problems include Third World economic development, the functioning of economic institutions (e.g., financial markets, labor matkets, 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.

## Requirements for the Major in Economics

The major consists of three core courses (Economics 255, 256, and 257), two advanced topics courses numbered in the 300 s , at least one of which must be designated as a seminar, and two additional courses in economics numbered 200 or higher. Only one of Economics 260 and 360 may be counted toward the economics major. Because Economics 101 is a prerequisite for Economics 102, and both are prerequisites for most other economics courses, most students will begin their work in economics with these introductory courses. Prospective majors are encouraged to take at least one core course by the end of the sophomore year, and all three core courses should normally be completed by the end of the junior year. Note that Economics 255 is a prerequisite to Economics 256. Advanced topics courses normally have some combination of Economics 255, 256, and 257 as prerequisites. Qualified students may undertake self-designed, interdisciplinary major programs or joint majors between economics and related fields of social analysis.

To fulfill the major (or minor) requirements in economics, or to serve as a prerequisite for nonintroductory courses, a grade of C - or better must be earned in a course. Courses required for the major must be taken on a graded basis (not Credit/D/Fail).
All prospective majors and minors are required to complete Mathematics 161, 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 181) and linear algebra (Mathematics 201) early in their careers. Such students are also encouraged to take Mathematics 265 instead of Economics 257 as a prerequisite for Economics 316. The Economics 257 requirement is waived for students who complete Mathematics 265 and Economics 316. Students should consult the Department of Economics about other mathematics courses that are essential for advanced study in economics.

## Interdisciplinary Major

The department participates in an interdisciplinary major in mathematics and economics. See page 201.

## Requirements for the Minor in Economics

The minor consists of Economics 255, and any two additional courses numbered 200 or higher. Only one of Economics 260 and 360 may be counted toward the economics minor. To fulfill the minor requirements or to serve as a prerequisite for other courses, a grade of Cor better must be earned in a course. Courses required for the minor must be taken on a graded basis (not Credit/D/Fail).

## Requirements for the Minor in Economics and Finance

The minor in economics and finance consists of Economics 255, 260, and 360, and one additional course at the 200 or 300 level selected from among Economics 209, 216, 238, 256, 257, 302, and 355. Since Economics 255 is a prerequisite for Economics 360 and other upper-level economics courses, prospective minors are encouraged to complete 255 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 on a graded basis (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 language by the department to enable them to indicate that they have done so.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
18b. The Art of the Deal: Commerce and Culture. Fall 2011. B. Zorina Khan.
Introductory, Intermediate, and Advanced Courses
100b. Introduction to the Economy. Spring 2012. Gregory P. DeCoster.
A non-technical introduction to the operation of modern capitalist economies, with a focus on the United States. Emphasizes use of a small number of fundamental concepts to clarify how economies function and to provide a foundation for informed evaluation of contemporary economic debates. Topics include incentives, decision-making, markets as a means of allocating resources, characteristics of market allocation, measures and history of U.S. economic performance, structure and function of the financial system, sources of economic growth, and business cycles. Periodic discussions of the role of government in the economy. Seeks to provide a level of economic literacy adequate to understanding debates as conducted in the popular press. Intended for students not planning to major in economics. Not open to students who have credit for Economics 101 or 102 . Does not satisfy the prerequisite for any other course in economics.

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

## Courses of Instruction

102b - MCSR. Principles of Macroeconomics. Every semester. The Department.
An introduction to economic analysis and institutions, with special emphasis on determinants of the level of national income, prices, and employment. Current problems of inflation and unemployment are explored with the aid of such analysis, and alternative views of the effectiveness of fiscal, monetary, and other governmental policies are analyzed. Attention is given to the sources and consequences of economic growth and to the nature and significance of international linkages through goods and capital markets.
Prerequisite: Economics 101.
209b. Money and Banking. Fall 2011. Paola Boel.
Introduction to the principles of money and banking. Closely examines the tools of monetary policy, as well as the determination of short- and long-term interest rates and exchange rates. Discusses the institutional structure of central banking and of financial intermediation in the American economy.

## Prerequisite: Economics 101 and 102.

211b - MCSR. Poverty and Redistribution. Fall 2012 or Spring 2013. John M. Fitzgerald.
Examines the causes and consequences of poverty and inequality in the United States and analyzes policy responses. Topics include social welfare theory, poverty measurement, discrimination, rising wage inequality, the working poor, and consequences of poverty for families and subsequent generations. Substantial focus on benefit-cost analysis and experimental and non-experimental evaluations of current policy, including welfare reform, education and training, and employment programs. Makes limited use of comparisons to other countries.

## Prerequisite: Economics 101.

212b - MCSR. Labor and Human Resource Economics. Spring 2012. Rachel Connelly.
A study of labor market supply and demand, with special emphasis on human resource policies, human capital formation, and wage inequality.
Prerequisite: Economics 101.
213b. History of Economic Thought. Fall 2012 or Spring 2013. Stephen Meardon.
A historical study of insights and methods of inquiry into the functions of markets and the role of government in shaping them. Readings include the original works of economic thinkers from the eighteenth to twentieth centuries, including Adam Smith, David Ricardo, Henty Carey, Karl Marx, Henry George, Thorstein Veblen, and John Maynard Keynes, among others. Different historiographical approaches are employed, including examination of the problems motivating past thinkers as well as the relevance of their ideas to modern economics.

Prerequisite: Economics 101 and 102, or permission of the instructor.
215b. Economics of the European Monetary Union. Fall 2012 or Spring 2013. Paola Boel.
An analysis of economic issues surrounding the European Monetary Union (EMU). Topics covered will include early attempts to establish a common currency area, the creation of the Euro zone as laid down in the Maastricht Treaty, the implementation and evolution of the EMU, and the prospects for entry of new members. The fiscal, financial, and political economy implications of the EMU are also discussed.

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

## Economics

218b - MCSR. Environmental Economics and Policy. Spring 2012. Erik Nelson.
An exploration of environmental degradation and public policy responses in industrial economies. Market failures, property rights, and materialistic values are investigated as causes of pollution and deteriorating ecosystem functions. Guidelines for equitable and costeffective environmental policy are explored, with an emphasis on the roles and limitations of cost-benefit analysis and techniques for estimating non-monetary values. Three core themes are the transition from "command and control" to incentive-based policies; the evolution from piecemeal regulation to comprehensive "green plans" (as in the Netherlands); and the connections among air pollution, energy systems, and global warming. (Same as Environmental Studies 218.)

Prerequisite: Economics 101 or permission of the instructor.
220b. International Economics. Spring 2012. Julián P. Díaz.
An introduction to the major concepts of international trade and international finance. Analyzes the main reasons why countries trade and the impact of trade on production, prices, and welfare. Additional topics include the use of quotas, tariffs, and other barriers to trade, trade liberalization reforms and regional trade blocs, and the globalization debate. Covers the main issues of international finance, including the structure of the balance of payments accounts, exchange rate determination and exchange rate regimes, currency crises, global imbalances, the role of the IMF, and currency unions such as the European Monetary Union. Not open to students who have credit for Economics 308 or 309.
Prerequisite: Economics 101 and 102.
221b - MCSR, ESD. Marxian Political Economy. Spring 2012. Jonathan P. Goldstein.
An alternative (heterodox) analysis of a capitalist market economy rooted in Marx's methodological framework, which focuses on the interconnected role played by market relations, class/power relations, exploitation and internal tendencies towards growth, crisis, and qualitative change. Students are introduced to the Marxian method and economic theory through a reading of Volume I of Capital. Subsequently, the Marxian framework is applied to analyze the modern capitalist economy with an emphasis on the secular and cyclical instability of the economy, changing institutional structures and their ability to promote growth, labor market issues, globalization, and the decline of the Soviet Union.
Prerequisite: Economics 100 or 101, or permission of the instructor.
225b - IP. The Economy of Latin America. Fall 2012 or Spring 2013. Julián P. Díaz.
Analyzes selected economic issues of Latin America in the twentieth century and into the twenty-first century. Issues covered include the Import Substitution Industrialization strategy, the Debt Crisis of the 1980s, stabilization programs, trade liberalization and economic integration, inflation and hyperinflation in the region, poverty and inequality, and the Washington Consensus and the rise of populism. Important economic episodes of the past three decades such as the Mexican Crisis of 1994-1995, the Chilean Economic Miracle, dollarization in Ecuador, and the recent crisis in Argentina will also be examined. (Same as Latin American Studies 235.)
Prerequisite: Economics 101 and 102.
[226b - IP. Political Economy of Pan-Americanism. (Same as Latin American
Studies 226.)]

227b - MCSR, IP. Human Resources and Economic Development. Fall 2012 or Spring 2013. Deborah S. DeGraff.

An analysis of human resource issues in the context of developing countries. Topics include the composition of the labor force by age and gender, productivity of the labor force, unemployment and informal sector employment, child labor and the health and schooling of children, and the effects of structural adjustment policies and other policy interventions on the development and utilization of human resources. Examples from selected African, Asian, and Latin American countries are integrated throughout and the interaction of sociocultural environments with economic forces is considered.

Prerequisite: Economics 101.
228b - MCSR. Natural Resource Economics and Policy. Fall 2012 or Spring 2013. Guillermo Herrera.

A study of the economic issues surrounding the existence and use of renewable natural resources (e.g., forestry/land use, fisheries, water, ecosystems, and the effectiveness of antibiotics) and exhaustible resources (such as minerals, fossil fuels, and old growth forest). A basic framework is first developed for determining economically efficient use of resources over time, then extended to consider objectives other than efficiency, as well as the distinguishing biological, ecological, physical, political, and social attributes of each resource. Uncertainty, common property, and various regulatory instruments are discussed, as well as alternatives to government intervention and/or privatization. (Same as Environmental Studies 228.)

## Prerequisite: Economics 101.

238b - MCSR. Economic History of American Enterprise. Fall 2011. B. Zorina Khan.
Considers the history of American enterprise over the past two centuries. First examines key issues in the economics of the firm, entrepreneurship, and innovation during the nineteenth century (the period of the second industrial revolution). Then addresses these issues from a more recent perspective (the so-called third industrial revolution). Assesses what lessons for the twenty-first century can be learned from an examination of the development of enterprise since the nineteenth century; and analyzes the extent to which today's "New Economy" raises novel questions for economic theory and its applications. Not open to students who have credit for Economics 208 or Economics 348.

Prerequisite: Economics 101 and 102.

## 239b - IP. Topics on Asian Economies. Spring 2012. Yao Tang.

A study of the similarities and differences in growth experience and the level of economic output per person in Asian countries. Explores possible causes of differences in economic paths, with a focus on several important economies, including China and Japan. Also discusses the relationship between the Asian economies and the United States economy. (Same as Asian Studies 231.)
Prerequisite: Economics 101 and 102.
[245b - MCSR. Strategic Choice and Reasoning in Economics, Politics, and Everyday Life.]
255b - MCSR. Microeconomics. Every semester. The Department.
An intermediate-level study of contemporary microeconomic theory. Analysis of the theory of resource allocation and distribution, with major emphasis on systems of markets and prices
as a social mechanism for making resource allocation decisions. Topics include the theory of individual choice and demand, the theory of the firm, market equilibrium under competition and monopoly, general equilibrium theory, and welfare economics.

Prerequisite: Economics 101, 102, and Mathematics 161 or higher.
256b - MCSR. Macroeconomics. Every semester. The Department.
An intermediate-level study of contemporary national income, employment, and inflation theory. Consumption, investment, government receipts, government expenditures, money, and interest rates are examined for their determinants, interrelationships, and role in determining the level of aggregate economic activity. Policy implications are drawn from the analysis.
Prerequisite: Economics 255 and Mathematics 161 or higher.
257b - MCSR. Economic Statistics. Every semester. The Department.
An introduction to the data and statistical methods used in economics. A review of the systems that generate economic data and the accuracy of such data is followed by an examination of the statistical methods used in testing the hypotheses of economic theory, both microand macro-. Probability, random variables and their distributions, methods of estimating parameters, hypothesis testing, regression, and correlation are covered. The application of multiple regression to economic problems is stressed. Students who have taken Mathematics 265 are encouraged to take Economics 316 instead of this course.

Prerequisite: Economics 101, 102, and Mathematics 161 or higher.

260b - MCSR. Finance I. Fall 2011. Gregory P. DeCoster.

As the first in a two-course sequence (Finance I and II-Economics 260 and 360 ), provides a thorough exposure to the fundamental concepts involved in corporate financial decisionmaking, investment analysis, and portfolio management. In addition, presents the financial accounting principles and practices necessary to understand and utilize corporate financial statements as inputs to decision-making and valuation exercises. Topics include functions and structure of the financial system; overview of valuation-measures of return and risk, and discounted cash-flow analysis; sources of financial information-basic accounting concepts, balance sheet, income statement, statement of cash-flows, and financial ratios; portfolio theory, the capital asset pricing model, and efficient markets theory; corporate decision-making, the cost of capital, capital budgeting, and capital structure. Mathematics 161 is recommended.

## Prerequisite: Economics 101 and 102.

[277-MCSR. Applied Research Practicum: Chinese Rural to Urban Migration. (Same as Asian Studies 269 and Gender and Women's Studies 277.)]
291b-294b. Intermediate Independent Study in Economics. The Department.
Courses numbered higher than 300 are advanced courses in economic analysis intended primarily for majors. Enrollment in these courses is limited to eighteen students in each unless stated otherwise. Elementary calculus will be used in all 300-level courses.
[301b. The Economics of the Family. (Same as Gender and Women's Studies 302.)]
302b. Business Cycles. Fall 2012 or Spring 2013. Jonathan P. Goldstein.
Seminar. A survey of competing theories of the business cycle, empirical tests of cycle theories, and appropriate macro stabilization policies. Topics include descriptive and historical analysis of cyclical fluctuations in the United States, Keynesian-Kaleckian multiplier-accelerator models, growth cycle models, theories of financial instability, Marxian crisis theory, new
classical and new Keynesian theories, and international aspects of business cycles. The current global financial crisis is also analyzed.

Prerequisite: Economics $\mathbf{2 5 6}$ or permission of the instructor.
308b. International Trade. Fall 2011. Julián P. Díaz.
Offers a theoretical and empirical analysis of international trade. Particular attention is given to the standard models of trade: the Ricardian model, the Heckscher-Ohlin model, the specific factors model, and the monopolistic competition model, as well as an introduction to applied general equilibrium models of trade liberalization. Also analyzes curtent topics such as barriers to trade (quotas, tariffs); the effects of trade liberalization on wage inequality; regional integration blocs; the globalization debate; and the relation between trade, growth, and productivity. Data analysis is used in order to evaluate the success or shortcomings of the theoretical models.

## Prerequisite: Economics 255 and 256.

309b. International Finance. Fall 2012 or Spring 2013. Yao Tang.
Seminar. Surveys a number of topics in international finance and international macroeconomics, including balance of payments, exchange rate determination, the MundellFleming model of output and exchange rate, exchange rate regimes, international capital flows, and international financial crises. Involves data analysis to empirically evaluate the theoretical models. Also provides a special focus on Asia by discussing issues such as Asia's role in the global imbalances, China's exchange rate regime, and the currency carry trade associated with the Japanese Yen.

Prerequisite: Economics 256 and 257, or permission of the instructor.
310b. Advanced Public Economics. Spring 2012. John M. Fitzgerald.
Seminar. A survey of theoretical and empirical evaluations of government activities in the economy, considering both efficiency and equity aspects. Topics include public choice, income redistribution, benefit-cost analysis, analysis of selected government expenditure programs (including social security), incidence and behavioral effects of taxation, and tax reform. Current public policy issues are emphasized. Not open to students who have credit for Economics 210.

Prerequisite: Economics 255 and 257, or permission of the instructor.
316b. Econometrics. Fall 2011. John M. Fitzgetald.
Seminar. A study of the mathematical formulation of economic models and the statistical methods of testing them. A detailed examination of the general linear regression model, its assumptions, and its extensions. Applications to both micro- and macroeconomics are considered. Though most of the course deals with single-equation models, an introduction to the estimation of systems of equations is included. An empirical research paper is required.

Prerequisite: Economics 257 or Mathematics 265, and Mathematics 161 or higher; or permission of the instructor.

318b. Environmental and Natural Resource Economics. Fall 2012 or Spring 2013. Guillermo Herrera.

Seminar. Analysis of externalities and market failure; models of optimum control of pollution and efficient management of renewable and nonrenewable natural resources such as fisheries, forests, and minerals; governmental vs. other forms of control of common-pool resources;
and benefit-cost analysis of policies, including market-based and non-market valuation. Permission of instructor required for students who have credit for Economics 218 (same as Environmental Studies 218) or 228 (same as Environmental Studies 228). (Same as Environmental Studies 318.)

Prerequisite: Economics 255 and 257.

## 319b. The Economics of Development. Fall 2011. Deborah S. DeGraff.

Seminar. Theoretical and empirical analysis of selected microeconomic issues within the context of developing countries. Has a dual focus on modeling household decisions and on the effects of government policy and intervention on household behavior and well being. Topics include agricultural production, land use systems, technology and credit markets, household labor allocation and migration, investment in education and health, and income inequality.

Prerequisite: Economics 257 or Mathematics 265, and Economics 255, or permission of the instructor.

## 321b. The Economics of Land Use, Ecosystem Services, and Biodiversity. Fall 2011. Erik Nelson.

Seminar. Analysis of the economic forces that shape land-use patterns, the relationship between land-use patterns and ecosystem service provision and biodiversity persistence, and the economic value of ecosystem service provision. Investigates methods for increasing ecosystem service values on the landscape and the economic cost of these methods. Analysis of land-use externalities and the failure of land-use patterns to generate maximum societal net benefits; neoclassical economic theory on land-use; methods for estimating market value of land; methods of non-market valuation; efficient land-use patterns from a societal perspective; methods for finding efficient land-use patterns; and governmental and non-governmental organization land conservation programs. Permission of instructor required during add/drop for students who have credit for Economics 218 (same as Environmental Studies 218) or 228 (same as Environmental Studies 228). (Same as Environmental Studies 321.)

## Prerequisite: Economics 255.

340b. Law and Economics. Spring 2012. B. Zorina Khan.
Seminar. Law and economics is one of the most rapidly growing areas in the social sciences. The field applies the concepts and empirical methods of economics to further our understanding of the legal system. Explores the economic analysis of law and legal institutions, including the economics of torts, contracts, property, crime, courts, and dispute resolution. Also focuses on topics in law and economics such as antitrust and regulation, corporations, the family, labor markets, product liability, and intellectual property. Students are introduced to online sources of information in law, and are required to apply economic reasoning to analyze landmark lawsuits in each of these areas. Not open to students who have credit for Economics 341.

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

## [355b. Game Theory and Strategic Behavior.]

356b. Monetary Economics. Spring 2012. Paola Boel.
Examines the role that money plays in market economies. Monetary policies, fiscal policies, and payment systems are studied. Particular attention is given to how inflation and taxes affect saving, investment, and output. The interaction of money with other assets, the banking

## Courses of Instruction

system, forms of credit, and alternatives to fiat money are also investigated.
Prerequisite: Economics 255 and 256.
360b. Finance II. Spring 2012. Gregory P. DeCoster.
A continuation of Economics 260. The focus is essentially two-fold: (1) What are the sources of business value, and how can it be created? (2) How can the uncertainty and risk inherent to intertemporal choices, i.e., capital accumulation, be "managed"? Involves analysis of business strategy with regard to both operations and financing decisions; the pricing and uses of financial derivatives (i.e., futures, options, and swaps); sources of risk and basic risk management techniques; and an examination of recent insights from behavioral finance.

Prerequisite: Economics 255 and 260.
401b-404b. Advanced Independent Study and Honors in Economics. The Department.

## Education

Nancy Jennings, Department Chair
Lynn A. Brettler, Department Coordinator
Associute Professors: Charles Dorn, Nancy Jennings
Assistant Professor: Doris A. Santoro
Lecturer: Kathleen O'Connor
Visiting Faculty: Kathryn Byrnes
Fellow: Mariana M. Cruz

Bowdoin College does not offer a major in education.

## Requirements for the Minor in Education

The department offers two minors: a Teaching minor for students who plan to teach in some capacity following graduation and an Education Studies minor for those who do not. Four courses are required for the Education Studies minor: either Education 20 or 101 and three others chosen from among Education 202, 203, 204, 205, 215, 221, 230, 235, 245, 250 (same as Government 219), 251, 310. Four courses are required for the Teaching minor: Education 20 or 101, 203, 301, 303. Courses that will count toward either minor must be taken on a graded basis (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, 14 -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 Department of Education Public School Teaching Certificate, making them eligible to teach in any public school in the United States.
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, students must apply for candidacy through the education department, be a community member in good standing, 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 301 and Education 303. Students must major in a subject area that enables them to be certified to teach by the State of Maine. Subject areas of certification include mathematics, life science, physical science, English, foreign language, 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. 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 $100 \%$.

## 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 jears 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 (Education 20 or 101, 203, 301, and 303).

During the spring semester of their junior or senior year, Teacher Scholars:
2. Enroll in Education 215: Adolescents in Schools.
3. Complete a full-time, 14 week practicum (students receive course credit for this practicum through Education 302: Student Teaching Practicum).
4. Enroll in Education 304: Seminar: Analysis of Teaching and Learning.

## Postgraduate Pathway

## By the time they graduate from Bowdoin, Teacher Scholars:

1. Complete prerequisite coursework (Education 20 or 101, 203, 301, and 303).

## During a spring semester and within two years of their Bowdoin graduation, Teacher Scholars:

2. Enroll in Education 215: Adolescents in Schools (if not taken prior to this time).
3. Complete a full-time, 14 -week practicum (students receive course credit for this practicum through Education 302: Student Teaching Practicum).
4. Enroll in Education 304: Seminar: Analysis of Teaching and Learning.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
20c. The Educational Crusade. Fall 2011. Charles Dorn.

## Courses of Instruction

## Introductory, Intermediate, and Advanced Courses

101c - ESD. Contemporary American Education. Fall 2011. Mariana Cruz and Doris Santoro. Spring 2012. Charles Dorn.
Examines current educational issues in the United States and the role schools play in society. Topics include the purpose of schooling; school funding and governance; issues of race, class, and gender; school choice; and the reform movements of the 1990s. The role of schools and colleges in society's pursuit of equality and excellence forms the backdrop of this study.

203c - ESD. Educating All Students. Fall 2011. Kathryn Byrnes. Spring 2012. Doris Santoro.
An examination of the economic, social, political, and pedagogical implications of universal education in American classrooms. Focuses on the right of every child, including physically handicapped, learning disabled, and gifted, to equal educational opportunity. Requires a minimum of twenty-four hours of observation in a local elementary school.

Prerequisite: Education 20 or 101.
211c. Education and the Human Condition. Fall 2011. Doris Santoro.
Explores the relationship between education and being/becoming human. Topics may be guided by the questions: What does it mean to be an educated person? How can education lead to emancipation? How might teaching and learning lead to the good life? What is our responsibility to teach the next generation? Readings may include works by Hannah Arendt, John Dewey, W. E. B. Du Bois, Plato, Jacques Rancière, among others.
215c. Adolescents in School. Spring 2012. Kathryn Byrnes.
Engages students in a study of adolescent development within the context of teaching and learning in schools. How do adolescents learn and develop? Why are identity and context so influential in adolescent learning and development? What practices and principles can schools/adults employ to promote adolescent engagement, motivation, interest in and skills for learning? Begins with classic conceptions of identity development, then moves to more contemporary understandings of adolescence as it both affects and is affected by school. Topics include physical, cognitive, social, and emotional development of the secondary school student and how this development impacts and is impacted by the learning environment.
Prerequisite: Education 20 or 101, and 203.

## [220c. The Stories We Tell: Analyzing Educational Narratives.]

## [221c. Democracy's Citadel: Education and Citizenship in America.]

230c. Latinos and Latinas in the United States: Migration, Education, and Community Development. Spring 2012. Mariana Cruz.

Explores the experiences of Latino/as, the fastest growing minority group in the United States, from a critical lens that centers three important themes: identity, education, and politics. Questions explored include: Who are the "Latino/as" in the United States? What are the differences between Hispanics, Latino/as, Latin Americans, and Chicano/as? What are the experiences of Latino/as in United States schools? How might educators, activists, and policymakers engage these questions in order to better understand and serve Latino/as a whole? Includes a service-learning and action-research component. (Same as Latin American Studies 230.)

250c. Education and Law. Every other year. Fall 2011. George S. Isaacson.
A study of the impact of the American legal system on the functioning of schools in the United States through an examination of Supreme Court decisions and federal legislation. Analyzes the public policy considerations that underlie court decisions in the field of education and considers how those judicial interests may differ from the concerns of school boards, administrators, and teachers. Issues to be discussed include constitutional and statutory developments affecting schools in such areas as free speech, sex discrimination, religious objections to compulsory education, race relations, teachers' rights, school financing, and education of the handicapped. (Same as Government 219.)

## 251c. Teaching Writing: Theory and Practice. Fall 2011. Kathleen O’Connor.

Explores theories and methods of teaching writing, emphasizing collaborative learning and peer tutoring. Examines relationships between the writing process and the written product, writing and learning, and language and communities. Investigates disciplinary writing conventions, influences of gender and culture on language and learning, and concerns of ESL and learning disabled writers. Students practice and reflect on revising, responding to others' writing, and conducting conferences. Prepares students to serve as writing assistants for the Writing Project.
Prerequisite: Selection during the previous spring semester by application to the Writing Project (see pages 277-78).

291c-294c. Intermediate Independent Study in Education. The Department.
301c. Teaching. Fall 2011. Nancy Jennings.
A study of what takes place in classrooms: the methods and purposes of teachers, the response of students, and the organizational context. Readings and discussions help inform students' direct observations and written accounts of local classrooms. Peer teaching is an integral part of the course experience. Requires a minimum of thirty-six hours of observation in a local secondary school. Education 303 must be taken concurrently with this course.
Prerequisite: Education 20 or 101, and Education 203; junior or senior standing; a major in a core secondary school subject area (English, foreign language, life science, mathematics, physical science, or social studies); and permission of the instructor.
302c. Student Teaching Practicum. Spring 2012. Charles Dorn and Doris Santoro. Required of all students who seek secondary public school certification, this final course in the student teaching sequence requires that students work full time in a local secondary school from early January to late April. Grading is Credit/D/Fail. Education 304 must be taken concurrently. Students must complete an application and interview.
Prerequisite: Education 203, 301, and 303; senior standing; a cumulative 3.0 grade point average; a 3.0 grade point average in Education 301 and 303 ; and permission of the instructor.
303c. Curriculum. Fall 2011. Kathryn Byrnes.
A study of the knowledge taught in schools; its selection and the rationale by which one course of study rather than another is included; its adaptation for different disciplines and for different categories of students; its cognitive and social purposes; the organization and integration of its various components. Education 301 must be taken concurrently with this course.
Prerequisite: Education 20 or 101, and Education 203; junior or senior standing; a major in a core secondary school subject area (mathematics, life science, physical science, English, foreign language, or social studies); and permission of the instructor.

304c. Seminar: Analysis of Teaching and Learning. Spring 2012. Charles Dorn and Doris Santoro.

Taken concurrently with Education 302, Student Teaching Practicum. Considers theoretical and practical issues related to effective classroom instruction.
Prerequisite: Education 203, 301, and 303; junior or senior standing; a cumulative 3.0 grade point average; a 3.0 grade point average in Education 301 and 303; and permission of the instructor.

## 310c. The Civic Functions of Higher Education. Fall 2011. Charles Dorn.

What does it mean for an institution of higher education to act in the public interest? How have interpretations of higher education's public service role changed throughout history? In what ways might a college, such as Bowdoin, fulfill its institutional commitment to promote the "common good"? Examines the civic functions adopted by and ascribed to institutions of higher education in America, from the seventeenth century to the present. Students investigate both how colleges and universities have employed civic rhetoric to advance institutional agendas and how societal expectations of civic responsibility have shaped these institutions over time. Students survey relevant literature in the history of liberal arts colleges, research universities, women's colleges, and historically Black colleges and universities; learn how historians frame questions, gather and interpret evidence, and draw conclusions; and conduct archival research, culminating in a case study of one institution's historically defined civic purpose.
Prerequisite: Education 20 or 101, or one course in history.
325b. Mindful Learning. Spring 2012. Kathryn Byrnes.
An exploration of the educational techniques/methods that human beings have found, across cultures and time, to concentrate, broaden, and deepen awareness of thoughts, emotions, and bodily sensations. Holistic and interdisciplinary lens on the theory and processes of how people learn. Focus on educational models that encourage and foster mindful learning such as Montessori and Waldorf. Seminar-style dialogue on course readings complemented by contemplative practices such as yoga, meditation, tai chi.

Prerequisite: Education 20 or 101, and Education 203.
401c-404c. Advanced Independent Study in Education. The Department.

## English

Peter Coviello, Department Chair<br>TBA, Department Coordinator

Professors: David Collings, Peter Coviello, Celeste Goodridge, Marilyn Reizbaum†, William C. Watterson<br>Associate Professors: Aviva Briefel*, Brock Clarke, Ann Louise Kibbie, Aaron Kitch, Elizabeth Muther*<br>Assistant Professors: Tess Chakkalakal (Africana Studies)†, Guy Mark Foster, Belinda Kong (Asian Studies), Hilary Thompson<br>Writer in Residence: Anthony E. Walton<br>Fellow: Megan L. Cook

## Requirements for the Major in English and American Literature

The major requires a minimum of ten courses. Each student must take one first-year seminat (English 10-29) or introductory course (English 104-110), either of which will serve as a prerequisite to further study in the major. At least three of the ten courses must be chosen from offerings in British and Irish literature before 1800. These are courses in Old English and Medieval literature, Renaissance literature, and the literature of the Restoration and the Eighteenth Century. 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. At least one of the ten courses must be chosen from offerings in literature of the Americas. The individual courses that satisfy this requirement are identified by a note in the course description. Also, each student must take at least one advanced seminar in the department (any 300-level English course). 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; 200 and/or 300 Literary Analysis; Independent Study; and 401-402 (Advanced Independent Study/Honors). No more than two courses may come from the department's roster of firstyear seminars and 100 -level courses; no more than two creative writing courses will count toward the major. As one of two courses outside the department, one upper-level course in film studies may be counted toward the major, courses in expository writing, journalism, and communication are not eligible for major credit. Credit toward the major for advanced literature courses in another language, provided that the works are read in that language, must be arranged with the chair.

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

## Interdisciplinary Major

The department participates in an interdisciplinary major in English and Theater. See pages 198-99.

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

The requirements for the Concentration in Creative Writing are identical to those of the English major, with these additions: a level I and a level II creative writing course in a single genre (poetry or fiction), and an additional elective course in creative writing.

## Requirements for the Minor in English and American Literature

The minor requires five courses in the department, including one first-year seminar (English 10-29) or introductory course (English 104-110). At least three of the remaining four courses must be numbered 200 or higher. No more than one creative writing course may count toward the minor, and no courses in expository writing, film, communication, or journalism will 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 first-year English seminars are numbered 10-19 in the fall; 20-29 in the spring. Usually there are not enough openings in the fall for all first-year students who want an English seminar. First-year students who cannot get into a seminar in the fall are given priority in the spring. The main purpose of the first-year seminars (no matter what the topic or reading list) is to give first-year students extensive practice in reading and writing analytically. Each seminar is normally limited to sixteen students and includes discussion, outside reading, frequent papers, and individual conferences on writing problems. For a full description of first-year seminars, see pages 141-51.

10c. Shakepeare's Afterlives. Fall 2011. Aaron Kitch.
11c. Sleeping with the Enemy: Representing Violence against Women. Fall 2011. Samaa Abdurraqib. (Same as Gender and Women's Studies 11.)

12c. African American Writers and the Short Story. Fall 2011. Guy Mark Foster. (Same as Africana Studies 14 and Gender and Women's Studies 14.)

13c. Hawthorne. Fall 2011. William Watterson.
14c. Modern American Poets. Fall 2011. Celeste Goodridge.
15c. Orphans of Asia. Fall 2011. Belinda Kong. (Same as Asian Studies 15.)
16c. Fan Fictions and Cult Classics. Fall 2011. Megan Cook.
17c. Animal Life. Fall 2011. Hilary Thompson.
18c. My Old School: Life, Literature, and College. Fall 2011. Brock Clarke.
20c. Ghosts. Spring 2012. Aviva Briefel.
21c. Of Comics and Culture. Spring 2012. Elizabeth Muther.
22c. Transfigurations of Song. Spring 2012. David Collings.

## Introductory Courses in Literature

104-110. 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.)

105c. Introduction to Poetry. Fall 2011. Peter Coviello.
Aims to understand poetry's varied workings, considering, most extensively, the basic materials-words, lines, metaphors, sentences-from which poems have traditionally been
assembled. By studying closely the components of meter, diction, syntax and line, rhyme, and figure-in essence, how poems work-aims to see more clearly into the ends poems work for: meaning, thapsody, transport, etc.

106c. Introduction to Drama. Spring 2012. Aaron Kitch.
Explores representative works from a wide range of genres and styles of theater, from the festival of Dionysus in ancient Greece through the Renaissance and into the global theater of the twenty-first century. Traces the evolution of plot design, with special attention to the politics of playing, the shifting strategies of representing human agency, and contemporary relationships between the theater and other visual media. Authors include Sophocles, Aristophanes, Marlowe, Shakespeare, Behn, Wilde, Beckett, Mamet, Wilson, and Churchill, with secondary texts by Aristotle, Brecht, Artaud, and Grotowski, among others. Students are asked to participate in staged readings during class and participate in group projects that imagine new ways to stage the plays we study. (Same as Theater 106.)
[109c. Introduction to Narrative through Short Fiction.]
111c - ESD. Introduction to LGBTQ Fiction. Spring 2012. Guy Mark Foster.
Using an intersectional reading approach, students closely analyze both classic and more contemporary lesbigay, trans, and queer fictional texts of the last one hundred years. Students consider the historically and culturally changing ways that sexuality has been understood within popular, medical, as well as religious discourses. And because gender conflict and the tendency to analogize the struggles of sexual and racial minorities are key features of this literary tradition, students are expected to engage this subject matter sensitively and critically. Possible texts include The Well of Loneliness, Giovanni's Room, Rubyfruit Jungle, A Single Man, Oranges Are Not the Onhy Fruit, and The Limits of Pleasure. (Same as Gay and Lesbian Studies 111 and Gender and Women's Studies 111.)

## Courses in Composition

60c. English Composition. Fall 2011. David Collings. Spring 2012. Ann Kibbie.
Practice in developing the skills needed to write and revise college-level expository essays. Explores the close relationship between critical reading and writing. Assignment sequences and different modes of analysis and response enable students to write fully developed expository essays. Does not count toward the major or minor in English.

## Introductory Courses in Creative Writing

125c. Creative Writing: Poetry I. Fall 2011. Anthony Walton.
Intensive study of the writing of poetry through the workshop method. Students expected to write in free verse and in form, and to read deeply from an assigned list of poets.

Prerequisite: Permission of the instructor.
128c. Introductory Fiction Workshop. Fall 2011 and Spring 2012. Brock Clarke.
Begins with an examination of some technical aspects of fiction writing. In particular, considers those that we tend to take for granted as readers and need to understand better as writers, e.g., point of view, characterization, dialogue, foreshadowing, scene, and summary. Students read and discuss published stories, and work through a series of exercises to write their own stories. Workshop discussion is an integral part.

## Courses of Instruction

139c. Nonfiction Writing: Creative Essays. Spring 2012. Celeste Goodridge.
Explores a range of sub-genres within the rich universe of contemporary non-fiction forms, including personal narratives, travel writing, food writing, the new journalism, and research narratives in the New Yorker mode. Students learn form and technique by engaging a variety of models within each sub-genre and write and workshop their own creative narratives in these styles. Extensive experience in writing creative non-fiction is not required. Designed to introduce students to the forms and to help them strengthen their research and writing skills in a workshop context.

## Advanced Courses in Creative Writing

## 213c. Telling Environmental Stories. Fall 2011. Anthony Walton.

Intended for students with a demonstrated interest in environmental studies, as an introduction to several modes of storytelling, which communicate ideas, historical narratives, personal experiences, and scientific and social issues in this increasingly important area of study and concern. Explores various techniques, challenges, and pleasures of storytelling, and examines some of the demands and responsibilities involved in the conveyance of different types of information with clarity and accuracy in nonfiction narrative. Engages student writing through the workshop method, and includes study of several texts, including The Control of Nature, Cadillac Desert, Living Downstream, and Field Notes from a Catastrophe. (Same as Environmental Studies 216).

Prerequisite: Permission of the instructor.

## [216c. Creative Writing: Poetry II.]

217c. Advanced Fiction Workshop. Spring 2012. Brock Clarke.
Presumes a familiarity with the mechanics of fiction and, ideally, previous experience in a fiction workshop. Uses published stories and stories by students to explore questions of voice and tone, structure and plot, how to deepen one's characters, and how to make stories resonate at a higher level. Students write several stories during the semester and revise at least one. Workshop discussion and critiques are an integral part. Formerly English 129.

Prerequisite: Permission of the instructor.

## Intermediate Courses 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.

## 207c. "The Uses of Nostalgia": Studies in the Literary Pastoral. Spring 2012. William

 Watterson.Readings in Theocritus, Vergil, Longus, Spenser, Shakespeare, Herrick, Milton, Marvell, Wordsworth, Hardy, D. H. Lawrence, Frost, and others. Topics include the myth of the Golden Age, Eden and the Fall, displacement of sensibility, the dialectic of town and country, the nature of primitivism, and the paradoxical mediation of nature by art. Attention also given to the theory and practice of pastoral scholarship over the last fifty years, with readings in Empson, Lévi-Strauss, Poggioli, Toliver, Williams, Montrose, and others.

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.

## Advanced Courses in English and American Literature

205c. Introduction to Medieval Literature: Monsters, Animals, and Women. Fall 2011. Megan Cook.

What did it mean to be human in medieval England? What did it mean to be nonhuman in medieval England? Explores these questions by reading a wide variety of texts from the eighth to the fifteenth centuries. Concentrates on the literary lives of three figures-the animal, the monster, and the woman-with the potential to challenge or subvert the boundaries between the natural and the unnatural, the rational and the irrational, and the known and unknowable. Texts may include Beowulf, Sir Gawain and the Green Knight, Mandeville's Travels, The Book of Margery Kempe, the Parliament of Fowls, selections from The Canterbury Tales, texts by Christine de Pizan, Julian of Norwich, as well as anonymous saints' lives and some early drama. Some texts will be read in translation.

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
206c. Medieval Women's Writing. Spring 2012. Megan Cook.
Introduces students to writing by, for, and about women in late medieval England. Traces the way these texts reflect and shape the social, religious, and domestic lives of women living in the period. Focuses on texts composed by women such as The Book of Margery Kempe and The Showings of Julian of Nonvich, but also includes works by men written for women's edification and entertainment and texts about women written by and for men. Readings may include manuals for religious women, lives of female saints, and books of instruction for young wives, as well as medical and scientific texts. Attention also given to the literary history of these works, and to contemporary critical approaches to issues of sexuality and gender in historical context. (Same as Gender and Women's Studies 209.)

Prerequisite: One first-year seminar or 100-level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
210c. Shakespeare's Comedies and Romances. Every other year. Spring 2012. William Watterson.

Examines A Midsummer Night's Dream, The Merchant of Venice, Twelfth Night, As You Like It, The Winter's Tale, and The Tempest in light of Renaissance genre theory. (Same as Theater 210.)

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
[211c. Shakespeare's Tragedies and Roman Plays. (Same as Theater 211.)]
212c. Shakespeare's History Plays. Fall 2011. William Watterson.
Explores the relationship of Richard III, 2 Henry VI, and the second tetralogy (Richard II, the two parts of Henry IV and Henry V) to the genre of English chronicle play that flourished in the 1580s and 1590s. Readings in primary sources (More, Hall, and Holinshed) are supplemented by readings of critics (Tillyard, Kelly, Siegel, Greenblatt, Goldberg, etc.) concerned with locating Shakespeare's own orientation toward questions of history and historical meaning. Regular screenings of BBC productions. (Same as Theater 212.)

Prerequisite: One first-year seminar or 100-level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.

## Courses of Instruction

214c - VPA. Playwriting. Every other year. Fall 2012. Roger Bechtel.
A writing workshop for contemporary performance that includes introductory exercises in writing dialogue, scenes, and solo performance texts, then moves to the writing (and rewriting) of a short play. Students read plays and performance scripts, considering how writers use image, action, speech, and silence; how they structure plays and performance pieces; and how they approach character and plot. (Same as Theater 260.)

Prerequisite: One 100 -level course in theater or dance or permission of the instructor.

## [226c. Renaissance Sexualities.]

229c. Milton. Every other year. Fall 2011. Ann Kibbie.
A critical study of Milton's major works in poetry and prose, with special emphasis on Paradise Lost.

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.

## 230c. Theater and Theatricality in the Restoration and the Eighteenth Century. Every other year. Fall 2012. Ann Kibbie.

An overview of the development of the theater from the reopening of the playhouses in 1660 to the end of the eighteenth century, with special emphasis on the emergence of new dramatic modes such as Restoration comedy, heroic tragedy, "she-tragedy," sentimental comedy, and opera. Other topics include the legacy of Puritan anxieties about theatricality; the introduction of actresses on the professional stage; adaptations of Shakespeare on the Restoration and eighteenth-century stage; other sites of public performance, such as the masquerade and the scaffold; and the representation of theatricality in the eighteenth-century novel. (Same as Theater 230.)

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
231c. The Age of Satire. Every other year. Spring 2012. Ann Kibbie.
Explores various forms of satire and parody in the prose, poetry, drama and visual art of the Restoration and the eighteenth century, as well as the various attempts to censor or otherwise control satire. Works include Alexander Pope's Rape of the Lock, John Gay's Beggar's Opera, Jonathan Swift's Gulliver's Travels, Henry Fielding's Tom Jones, and the paintings and prints of William Hogarth.

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
236c. Romantic Sexualities. Fall 2011. David Collings.
Investigates constructions of sexuality in English romantic writing. Examines tales of seduction by supernatural or demonic figures; the sexualized world of the Gothic; the Byronic hero; lyrical depictions of incest; the yearning for an eroticized muse or goddess; and same-sex desire in travel writing, diaries, and realist fiction. Discusses the place of such writing in the history of sexual identities, repression, the unconscious, and the sublime. Authors may include Burke, Lewis, Mary Shelley, Byron, Wollstonecraft, Lister, Austen, Coleridge, Keats, and Percy

Shelley, with further readings in queer theory and the history of sexuality. (Same as Gay and Lesbian Studies 236 and Gender and Women's Studies 234.)

Prerequisite: One first-year seminar or 100 -level course in English, gay and lesbian studies, or gender and women's studies.
242c. Victorian Race and Empire. Spring 2012. Aviva Briefel.
Examines Victorian constructions of racial difference and imperial relationships in literary texts ranging from the 1830 s to the fin de siècle. Of central concern will be issues of representation and racialized identity; fantasies about nationhood and colonialism; narratives of "adventure" at home and abroad; and images of gender and sexuality. Literary criticism central to discussions. Authors may include C. Brontë, Conrad, Doyle, Du Maurier, Haggard, Kipling, Marsh, and F. A. Steel. (Same as Gay and Lesbian Studies 241 and Gender and Women's Studies 241.)
Prerequisite: One first-year seminar or 100 -level course in English.

## [243c. Victorian Genders. (Same as Gay and Lesbian Studies 243 and Gender and Women's Studies 239.)]

245c. Modernism/Modernity. Every other year. Fall 2013. Marilyn Reizbaum.
Examines the cruxes of the "modern," and the term's shift into a conceptual category rather than a temporal designation. Although not confined to a particular national or generic rubric, takes British works as a focus. Organized by movements or critical formations of the modern, i.e., modernisms, psychoanalysis, postmodernism, cultural critique. Readings of critical literature in conjunction with primary texts. Authors/directors/works may include T. S. Eliot, Joyce's Dubliners, Lawrence's Sons and Lovers, Sontag's On Photography, W. G. Sebald's The Natural History of Destruction, Ian McEwen's Enduring Love, Stevie Smith, Kureishi's My Son the Fanatic, and Coetzee's Disgrace. (Same as Gay and Lesbian Studies 245 and Gender and Women's Studies 247.)
Prerequisite: One first-year seminar or 100 -level course in English, gay and lesbian studies, or gender and women's studies.

248c. The Modern Novel. Every other year. Spring 2013. Marilyn Reizbaum.
A study of the modern impulse in the novel genre in English. Considers origins of the modern novel and developments such as modernism, postmodernism, realism, formalism, impressionism, the rise of short fiction. Focuses on individual or groups of authors and takes into account theories of the novel, narrative theory, critical contexts. Topics shift and may include Philip Roth, Henry Roth, Virginia Woolf, James Joyce, Rebecca West, Dorothy Richardson, Lorrie Moore, Ford Madox Ford, J. M. Coetzee, W. G. Sebald, F. Scott Fitzgerald, John Banville, Ian Watt, Peter Brook, and Franco Moretti.

Prerequisite: One first-year seminar or 100 -level course in English.
250c. Early American Literature. Fall 2011. Peter Coviello.
A study of the writing produced in colonial, revolutionary, and post-revolutionary America. Prominent concerns are the Puritan covenant, nationalism, democracy and consensus, revolutionary rupture, and the evolving social meanings of gender and of race. Readings may include Bradstreet, Edwards, Franklin, Wheatley, Brockden Brown, Irving, and Cooper.
Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the literature of the Americas requirement for English majors.

## Courses of Instruction

251c. The American Renaissance. Every other year. Spring 2013. Peter Coviello.
Considers the extraordinary quickening of American writing in the years before the Civil War. Of central concern are the different visions of "America" these texts propose. Authors may include Emerson, Poe, Douglass, Hawthorne, Jacobs, Melville, Stowe, Dickinson, and Whitman.

Prerequisite: One first-year seminar or 100-level course in English.
Note: This course fulfills the literature of the Americas requirement for English majors.
252c. Empire of Feeling. Spring 2012. Peter Coviello.
A study of the relations between sentiment and belonging across the American nineteenth century. Considers how a language of impassioned feeling promised to consolidate a nation often bitterly divided, and some of the problems with that promise. Centers on a reading of Harriet Beecher Stowe's Uncle Tom's Cabin. Other authors may include Jefferson, Wheatley, Melville, Hawthorne, Wilson, and Du Bois. (Same as Africana Studies 252 and Gender and Women's Studies 252.)

Prerequisite: One first-year seminar or 100 -level course in English, Africana studies, or gender and women's studies.

## [253c. Topics in Twentieth-Century American Literature.]

254c. Twentieth-Century American Poetry. Spring 2012. Celeste Goodridge.
Begins with readings of William Carlos Williams, then takes up a number of contemporary poetic projects, including those of Philip Levine, Mark Doty, Louise Gluck, Laurie Scheck, and Amy Clampitt. Emphasis on different modes of poetic influence, the role of high and low culture in these canons, and the role of narrative, biography, and performativity in this work.

Prerequisite: One first-year seminar or 100-level course in English.
Note: This course fulfills the literature of the Americas requirement for English majors.
[255c. Topics in Contemporary Literature Post 1945: Cold War Literature and Culture. (Same as Gay and Lesbian Studies 255.)]
[260c. African American Fiction: (Re)Writing Black Masculinities. (Same as Africana Studies 260 and Gender and Women's Studies 260.)]

270c - ESD. African American Fiction: Humor and Resistance. Spring 2012. Elizabeth Muther.

Explores rich traditions of African American humor in fiction, comics, graphic narratives, and film. Considers strategies of cultural survival and liberation, as well as folkloric sources, trickster storytellers, comic double-voicing, and the lampooning of racial ideologies. Close attention paid to modes of burlesque, satirical deformation, caricature, tragicomedy, and parody in historical and contemporary contexts, including such writers and performers as Charles Chesnutt, Bert Williams, Langston Hughes, Zora Neale Hurston, Richard Pryor, Ishmael Reed, Aaron McGruder, Dave Chappelle, and Suzan-Lori Parks. (Same as Africana Studies 270.)

Prerequisite: One first-year seminar or 100-level course in English or Africana studies.
Note: This course fulfills the literature of the Americas requirement for English majors.

271c - ESD. Introduction to Asian American Literature. Fall 2011. Belinda Kong.
An introduction not only to the writings of Asian America, but also to the historical development of Asian American literature as a field of discussion, study, and debate. Begins by focusing on a seminal moment in the formation of this field: the critical controversy sparked by the publication of Maxine Hong Kingston's The Woman Warrior (1976). Then turns to earlier classics as well as more recent fiction and questions of how to reconceive Asian American literature in light of these works. In addition to Kingston, authors may include Amy Tan, David Henry Hwang, Frank Chin, John Okada, Jade Snow Wong, Carlos Bulosan, Chang-rae Lee, Jhumpa Lahiri, Susan Choi, Lan Cao, and Iê thi diem thúy. (Same as Asian Studies 213.)

Prerequisite: One first-year seminar or 100 -level course in English, or one course in Asian studies.

Note: This course fulfills the literature of the Americas requirement for English majors.
[273c - ESD, IP. Writing China from Afar. (Same as Asian Studies 212.)]
[274c - ESD, IP. Asian Diaspora Literature of World War II. (Same as Asian Studies 216.)]
[276c - ESD. Queer Race. (Same as Africana Studies 276 and Gay and Lesbian Studies 276.)]

279c - ESD, IP. Asian America's Aging. Spring 2012. Belinda Kong.
Asian American literature is dominated by voices of youth: the child narrator and the bildungsroman genre have long been used by writers to tell not only personal coming-of-age stories but also that of Asian America itself, as a relative newcomer into the American nation-state and its cultural landscape. Focuses instead on the latecoming figure of the aged narrator in recent Asian American fiction, who constellates themes of dislocation and reclamation, memory, and the body rather than those of maturation and heritage. Explores old age as a vehicle for engaging contemporary issues of globalization and diaspora; historical trauma and cultural memory; life and biopolitics. Examines these works within the paradigm of transnational Asian America, which goes beyond the United States as geographical frame to shed light on the new diasporic identities and cultural politics emerging from twentieth-century global transits. (Same as Asian Studies 224.)

Prerequisite: One first-year seminar or 100 -level course in English or Asian studies.
Note: This course fulfills the literature of the Americas requirement for English majors.
282c. Introduction to Literary and Cultural Theory. Spring 2012. David Collings.
Explores works of critical theory that have had the greatest impact on literary and cultural studies over the past four decades. Considers representative examples of Marxism, psychoanalysis, structuralism, deconstruction, feminism, the critical analysis of power, historicism, queer theory, critical race theory, postcolonial studies, and trauma theory. Examines questions such as these: To what extent is any text consistent with itself, or does it inevitably undermine its key concepts in the course of articulating them? Do texts that encode social privilege resist it as well? How reliable are the oppositions that anchor critical reading, such as male/female, straight/gay, white/black, or home/exile? Where is meaning or non-meaning to be found in the author's intention, the text itself, symptoms of its unconscious desire, the political ideologies in which it is implicated, or its intervention into its historical moment? Discusses work by authors such as Marx, Freud, Benjamin, Saussure, Barthes, Derrida,

## Courses of Instruction

Foucault, Lacan, Bourdieu, Bakhtin, Zizek, Rubin, Sedgwick, Butler, Armstrong, Appiah, Lott, and Gikandi.

Prerequisite: One first-year seminar or 100-level course in English, Africana studies, or gender and women's studies; or Gay and Lesbian Studies 201.

## [285c - ESD, IP. Global Fiction and "The Great Game."]

## 286c - ESD, IP. Forbidden Capital: Contemporary Chinese and Chinese Diaspora Fiction. Spring 2012. Belinda Kong.

"To get rich is glorious!"-so goes the slogan popularly attributed to Deng Xiaoping, who ushered 1980s China into an era of economic liberalization. Examines post-Tiananmen fiction from Mainland China as well as the diaspora that responds to, struggles with, and/ or satirizes the paradoxes of socialist capitalism. Critical issues include representations of the Communist Party and the intertwined tropes of corruption and consumption, and sometimes cannibalism; debates on the democratizing promise of capital, with attention to the resurgence of nationalism and the geopolitics of the Beijing Olympics; and the new identities made possible but also problematic by this era's massive transformations of social life, along the axes of sexuality, gender, and class. (Same as Asian Studies 217.)
Prerequisite: One first-year seminar or 100-level course in English or Asian studies.
287c - ESD, IP. Literatures of Global English. Spring 2012. Hilary Thompson.
Explores modern and contemporary literature from around the world, considering modes of writing that have developed with the global spread of the English language and other languages' collision with English. Attention given to vernacular writing and the embrace of so-called "non-standard," "weird," or "rotten" English. Examines ways writers have engaged with the history of colonialism and the forces of globalization as well as their attempts to forge a new cosmopolitan literature.
Prerequisite: One first-year seminar or 100 -level course in English.
291c-294c. Intermediate Independent Study in English. The Department.

## 310-350. Advanced Literary Study. Every year.

English 300 -level courses are advanced seminars; students who take them are normally English majors. Their content and perspective varies-the emphasis may be thematic, historical, generic, biographical, etc. All require extensive reading in primary and collateral materials.
315. Contemporary African American Film. Spring 2012. Elizabeth Muther

Explores a spectrum of recent films about African American culture and history. Topics may include the documentary impulse in contemporary African American film; gender, sexuality, and cultural images; the politics of interpretation-writers, filmmakers, critics, and audiences; the urban context and the economics of alienation. One-half credit course. (Same as Africana Studies 315.)
Prerequisite: One 200-level course in English or Africana studies; or permission of the instructor.

319c. James Baldwin. Spring 2012. Guy Mark Foster.
Examines the major postwar writings of the controversial African American author and the role his fiction and nonfiction played in challenging that era's static understandings of racial, gender, and sexual politics. Although Baldwin lived abroad for much of his life, many critics associate the author narrowly with the United States black civil rights and sexual liberation
struggles. In recent years, however, Baldwin has increasingly been recognized as a transnational figure and for his invaluable contributions to the discourse of globalization. Indeed, Baldwin's "geographical imagination," one informed by critical racial literacy, led him to anticipate many of the central insights of contemporary Queer Studies, Whiteness Studies, as well as Africana philosophical thought. (Same as Africana Studies 319 and Gay and Lesbian Studies 319.)

Prerequisite: One 200-level course in English, Africana studies, or gay and lesbian studies; or permission of the instructor.
Note: This course fulfills the pre-1800 literature requirement for English majors.
330c. Cultural Production during the Cold War. Fall 2011. Celeste Goodridge.
Considers the culture, values, and ideologies of postwar America. Through close analysis of literary texts and a consideration of the culture broadly, considers how these texts both reflect and sometimes subvert the dominant ideologies of cold war America. Authors include Truman Capote, Salinger, Plath, Patricia Highsmith, Baldwin, Tennessee Williams, and Mary McCarthy. Also considers representations of the period in Life magazine. (Same as Gay and Lesbian Studies 330.)
Prerequisite: One 200-level course in English or permission of the instructor.
Note: This course fulfills the literature of the Americas requirement for English majors.
334c. The Secret Life of Things. Fall 2011. Ann Kibbie.
We tend to focus on the people who populate literary texts, but literature is also filled with significant things: money; tools; weapons; clothing; furniture; toys; portraits; jewels; body parts that, once detached from their "owners," have become mere objects, such as hair and amputated limbs; and those beings that are sentient but nonhuman, and therefore resist easy classification, animals. Explores the role of things, and the aesthetic, legal, and philosophical questions they raise, in a variety of literary texts, including Daniel Defoe's Robinson Crusoe, Jonathan Swift's Gulliver's Travels, Alexander Pope's The Rape of the Lock, and Charles Dickens' Our Mutual Friend.

Prerequisite: One 200-level course in English or permission of the instructor.
Note: This course fulfills the pre-1800 literature requirement for English majors.
337c. Queer Child. Spring 2012. Peter Coviello.
Considers questions of desire, violence, and sexual identity in relation to a concept often understood to be defined by the absence of precisely those things: the child. We will ask: Is queer childhood only ever a notion assembled in retrospect? What kinds of relation obtain between queer adults and the children they were, and the children who come after them? What makes children queer? Readings may include James, McCullers, Woolf, Freud, Foucault, as well as the work of much contemporary queer scholarship. (Same as Gay and Lesbian Studies 337.)

Prerequisite: One 200-level course in English or gay and lesbian studies, or permission of the instructor.

401c-404c. Advanced Independent Study and Honors in English. The Department.

# Environmental Studies 

Philip Camill, Program Director<br>Eileen Sylvan Johnson, Program Manager, Rosemary Armstrong, Program Assistant

Associate Professors: Philip Camill (Earth and Oceanographic Science), Matthew Klingle $\dagger$ (History), John Lichter (Biology), Lawrence H. Simon $\dagger$ (Philosophy), Dharni Vasudevan (Chemistry)
Assistant Professor: Connie Y. Chiang (History)
Lecturers: DeWitt John**, Eileen Sylvan Johnson, Jill E. Pearlman, Conrad Schneider Fellow: Megs Gendreau
Contributing Faculty: Mark O. Battle, David Collings, Damon P. Gannon, Guillermo Herrera†, Amy S. Johnson, Susan A. Kaplant, Edward P. Laine, Peter D. Leat, Barry Logan, Sarah F. McMahon**, Erik Nelson, Nancy E. Riley, Collin Roesler, Allen L. Springer, Anthony Walton, Allen Wells, Nathaniel T. Wheelwright, Enrique Yepes

## Requirements for the Coordinate Major in Environmental Studies (ES)

Among Bowdoin's major programs, the coordinate major is unique to the Environmental Studies Program. An environmental studies major must also have a disciplinary major, either in a departmental major such as biology, economics, history, etc., or in a program major such as Asian studies, gender and women's studies, etc. Courses taken to satisfy the College's distribution requirements or to fulfill the requirements of the second major may be doublecounted 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 ES major requires the following courses:

1. Introductory, interdisciplinary course: ES 101 Introduction to Environmental Studies, preferably taken as a first-year student.
2. One 100 -level or higher course in biology, chemistry, earth and oceanographic science, or physics.
3. One environmental science course: ES 201 Perspectives in Environmental Science (same as Biology 158 and Chemistry 105).
4. One environmental social science course chosen from: ES 207 Building Healthy Communities (same as Government 207); ES 218 Environmental Economics (same as Economics 218); ES 228 Natural Resource Economics (same as Economics 228); ES 240 Environmental Law and Policy; or ES 263 International Environmental Policy (same as Government 263). Previous courses that can count towards this requirement include ES 202 Environmental Policy and Politics (same as Government 202), ES 221 Environmental Inequality and Justice (same as Sociology 221), ES 257 Anthropology and the Environment (same as Anthropology 257), ES 264 Energy, Climate, and Air Quality (same as Government 264), and ES 272 The Right to be Cold: Contemporary Arctic Environmental and Cultural Issues (same as Anthropology 272). Please check the Environmental Studies Program website for current courses satisfying this requirement.
5. One environmental humanities course: ES 203 Environment and Culture in North American History (same as History 242).
6. One senior seminar: A culminating course that provides an opportunity for exploration of a topic or a senior capstone course experience of one semester is required of majors. 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 on 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):

ES Disciplinary Concentrations: For this option, ES coordinate majors must take three 100 -level or above courses within one of the following concentrations:
-for History, Landscape, Values, Ethics, and the Environment, students choose from ES courses designated with a "c"
-for Environmental Economics and Policy, students choose ES courses designated with a "b"
-for the Interdisciplinary Environmental Science Concentration, students choose ES courses designated with an "a" (in addition, Chemistry 210 Chemical Analysis and Chemistry 240 Inorganic Chemistry count toward this concentration). ES majors are strongly advised to take one of the ES science courses outside of their departmental requirements. ES science majors should consult with their ES science advisor in identifying a science course outside their major.

Student-designed Environmental Studies Concentration: Students majoring in ES have the option of designing their own concentration consisting of three courses in addition to the core courses and senior seminars. 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 ES 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 101; two courses at the 200 level or higher, one of which should be outside a student's departmental major; and two core courses in the disciplinary area as specified below. Courses taken to satisfy the College's distribution requirements or to fulfill the requirements of the second major may be doublecounted 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: ES 203 Environment and Culture in North American History (same as History 242) and one social science course from the following: ES 207 Building Healthy Communities (same as Government 207); ES 218 Environmental Economics (same as Economics 218); ES 228 Natural Resource Economics (same as Economics 228); ES 240 Environmental Law and Policy; or ES 263 International Environmental Policy (same as Government 263). Previous courses that can count towards this requirement include ES 202 Environmental Policy and Politics (same as Government 202), ES 221 Environmental Inequality and Justice (same as Sociology 221), ES 257 Anthropology and the Environment (same as Anthropology 257), ES 264 Energy, Climate, and Air Quality (same as Government 264), and ES 272 The Right to be Cold: Contemporary Arctic Environmental and Cultural Issues (same as Anthropology 272).
-for social science majors: ES 201 Perspectives in Environmental Science (same as Biology 158 and Chemistry 105) and ES 203 Environment and Culture in North American History (same as History 242).
-for bumanities majors: ES 201 Perspectives in Environmental Science (same as Biology 158 and Chemistry 105), and one social science course from the following: ES 207 Building Healthy Communities (same as Government 207); ES 218 Environmental Economics (same as Economics 218); ES 228 Natural Resource Economics (same as Economics 228); ES 240 Environmental Law and Policy; or ES 263 International Environmental Policy (same as Government 263). Previous courses that can count towards this requirement include ES 202 Environmental Policy and Politics (same as Government 202), ES 221 Environmental Inequality and Justice (same as Sociology 221), ES 257 Anthropology and the Environment (same as Anthropology 257), ES 264 Energy, Climate, and Air Quality (same as Government 264), and ES 272 The Right to be Cold: Contemporary Arctic Environmental and Cultural Issues (same as Anthropology 272).

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
12c. Campus: Architecture and Education in the American College, 1800-2000. Fall 2011. Jill Pearlman.
[15c. Frontier Crossings: The Western Experience in American History. (Same as History 15.)]

## Introductory, Intermediate, and Advanced Courses

71a - INS, VPA. Bird Song, Human Song. Spring 2012. Robert Greenlee and Nathaniel T. Wheelwright.

A study of avian and human melodies, including the mechanics, anatomy, neurobiology, and endocrinology of sound production and recognition in birds and humans; ecological and evolutionary contexts of song; and interspecific influences on songs. Songs and calls, identified aurally and through sonograms and basic music notation, are used to inspire new musical compositions that explore the musical relationships between humans and birds. Required field trips, research projects, and anatomy laboratories. Although no music or biology experience is required or presumed, students should have a strong interest in learning about birds and music. (Same as Biology 71 and Music 71.)

81a - INS. Physics of the Environment. Spring 2012. Mark Battle.
An introduction to the physics of environmental issues, including past climates, anthropogenic climate change, ozone destruction, and energy production and efficiency. (Same as Physics 81.)
101. Introduction to Environmental Studies. Every fall. Megs Gendreau, DeWitt John, and Dharni Vasudevan.

An interdisciplinary introduction from the perspectives of the natural sciences, the social sciences, and moral philosophy to the variety of environmental problems confronting us today. Provides an overview of the state of scientific knowledge about major environmental problems, both global and regional, an analysis of the ethical problems they pose, potential responses of governments and individuals, and an exploration of both the successes and the inadequacies of environmental policy. Topics include air pollution, fisheries, and chemicals in the environment as well as global population, climate change, energy, and sustainability.

102a - INS. Introduction to Oceanography. Every spring. Collin Roesler.
The fundamentals of geological, physical, chemical, and biological oceanography: tectonic evolution of the ocean basins, ocean circulation, chemical cycles, primary production and trophodynamics and the oceans' role in climate change. Weekly labs will apply the principles in the setting of Casco Bay and the Gulf of Maine. (Same as Earth and Oceanographic Science 102.)

104a - MCSR, INS. Environmental Geology and Hydrology. Every spring. Spring 2012. Gabrielle David.

An introduction to aspects of geology and hydrology that affect the environment and land use. Topics include lakes, watersheds and surface-water quality, groundwater contamination, coastal erosion, and landslides. Weekly labs and field trips examine local environmental problems affecting Maine's rivers, lakes, and coast. Students complete a community-based research project on Maine water quality. Formerly Geology 100 (same as Environmental Studies 100). (Same as Earth and Oceanographic Science 104.)

154a. Ecology of the Gulf of Maine and Bay of Fundy. Fall 2012. Damon Gannon.
The Gulf of Maine/Bay of Fundy system is a semi-enclosed sea bordered by three U.S. states and two Canadian provinces. It supports some of the world's most productive fisheries and played a key role in European colonization of North America. Investigates how the species found in this body of water interact with each other and with the abiotic components of their environment. Topics include natural history; geological and physical oceanography; characteristics of major habitats; biology of macroinvertebrates, fishes, seabirds, and marine mammals; biogeography; food webs; and fisheries biology. Examines how human activities such as fishing, aquaculture, shipping, and coastal development affect the ecology of the region. Includes lectures, discussions of the primary literature, and field excursions. (Same as Biology 154.)
Prerequisite: Biology 102 or 109.
200a. Biogeochemistry: An Analysis of Global Change. Every fall. Philip Camill.
Understanding global change requires knowing how the biosphere, geosphere, oceans, ice, and atmosphere interact. An introduction to earth system science, emphasizing the critical interplay between the physical and living worlds. Key processes include energy flow and material cycles, soil development, primary production and decomposition, microbial ecology and nutrient transformations, and the evolution of life on geochemical cycles in deep time. Terrestrial, wetland, lake, river, estuary, and marine systems are analyzed comparatively. Applied issues are emphasized as case studies, including energy efficiency of food production, acid rain impacts on forests and aquatic systems, forest clearcutting, wetland delineation, eutrophication of coastal estuaries, ocean fertilization, and global carbon sinks. (Same as Earth and Oceanographic Science 200.)
Prerequisite: One of the following: Earth and Oceanographic Science 101, 102 (same as Environmental Studies 102), 103 (same as Environmental Studies 103), or 104 (same as Environmental Studies 104) [formerly Geology 100 (same as Environmental Studies 100)]; Biology 102 or 109; or Chemistry 102 or 109.

201a - MCSR, INS. Perspectives in Environmental Science. Every spring. Spring 2012. John Lichter and Dharni Vasudevan.

Functioning of the earth system is defined by the complex and fascinating interaction of processes within and between four principal spheres: land, air, water, and life. Leverages key
principles of environmental chemistry and ecology to unravel the intricate connectedness of natural phenomena and ecosystem function. Fundamental biological and chemical concepts are used to understand the science behind the environmental dilemmas facing societies as a consequence of human activities. Laboratory sessions consist of local field trips, laboratory experiments, group research, case study exercises, and discussions of current and classic scientific literature. (Same as Biology 158 and Chemistry 105.)

Prerequisite: One 100-level or higher course in biology, chemistry, earth and oceanographic science, or physics.
203c - ESD. Environment and Culture in North American History. Every spring. Spring 2012. Connie Chiang.

Explores relationships between ideas of nature, human transformations of the environment, and the effect of the physical environment upon humans through time in North America. Topics include the "Columbian exchange" and colonialism; links between ecological change and race, class, and gender relations; the role of science and technology; literary and artistic perspectives of "nature"; agriculture, industrialization, and urbanization; and the rise of modern environmentalism. (Same as History 242.)
Prerequisite: Environmental Studies 101 or permission of the instructor.
204a. Introduction to Geographic Information Systems. Every year. Fall 2011. Eileen Johnson.
Geographical information systems (GIS) organize and store spatial information for geographical presentation and analysis. They allow rapid development of high quality maps, and enable powerful and sophisticated investigation of spatial patterns and interrelationships. Introduces concepts of cartography, database management, remote sensing, and spatial analysis. The productive use of GIS technology in the physical and social sciences, environmental management, and regional planning is investigated through a variety of applied exercises and problems culminating in a semester project that addresses a specific environmental application.

## 207b. Building Healthy Communities. Spring 2013. DeWitt John.

Examines efforts by communities and regions to build strong local economies, safeguard important environmental values, protect public health, and address issues of economic and social justice. In many communities, metropolitan areas, and rutal regions, state and local government officials work with other leaders to set ambitious goals for economic and environmental sustainability and to develop specific plans for sustainable development. These efforts cross political, institutional, and sectoral barriers, thus challenging and sometimes reshaping state and local politics as well as American federalism. Examines how local leaders can work in complex settings to set goals and mobilize federal, private, and nonprofit resources to achieve specific, cross-cutting objectives. (Same as Government 207.)

Prerequisite: One course in environmental studies or government.
210a - MCSR, INS. Plant Physiology. Fall 2011. Barry A. Logan.
An introduction to the physiological processes that enable plants to grow under the varied conditions found in nature. General topics discussed include the acquisition, transport, and use of water and mineral nutrients, photosynthetic carbon assimilation, and the influence of environmental and hormonal signals on development and morphology. Adaptation and
acclimation to extreme environments and other ecophysiological subjects are also discussed. Weekly laboratories reinforce principles discussed in lecture and expose students to modern research techniques. (Same as Biology 210.)

Prerequisite: Biology 102 or 109.
215a - MCSR, INS. Behavioral Ecology and Population Biology. Every fall. Nathaniel T. Wheelwright.

Study of the behavior of animals and plants, and the interactions between organisms and their envitonment. Topics include population growth and structure, and the influence of competition, predation, and other factors on the behavior, abundance, and distribution of plants and animals. Laboratory sessions, field trips, and research projects emphasize concepts in ecology, evolution and behavior, research techniques, and the natural history of local plants and animals. Optional field trip to the Bowdoin Scientific Station on Kent Island. (Same as Biology 215.)
Prerequisite: Biology 102 or 109.
216c. Telling Environmental Stories. Fall 2011. Anthony Walton.
Intended for students with a demonstrated interest in environmental studies, as an introduction to several modes of storytelling, which communicate ideas, historical narratives, personal experiences, and scientific and social issues in this increasingly important area of study and concern. Explores various techniques, challenges, and pleasures of storytelling, and examines some of the demands and responsibilities involved in the conveyance of different types of information with clarity and accuracy in nonfiction narrative. Engages student writing through the workshop method, and includes study of several texts, including The Control of Nature, Cadillac Desert, Living Downstream, and Field Notes from a Catastrophe. (Same as English 213.)
Prerequisite: Permission of the instructor.
218b - MCSR. Environmental Economics and Policy. Spring 2012. Erik Nelson.
An exploration of environmental degradation and public policy responses in industrial economies. Market failures, property rights, and materialistic values are investigated as causes of pollution and deteriorating ecosystem functions. Guidelines for equitable and costeffective environmental policy are explored, with an emphasis on the roles and limitations of cost-benefit analysis and techniques for estimating non-monetary values. Three core themes are the transition from "command and control" to incentive-based policies; the evolution from piecemeal regulation to comprehensive "green plans" (as in the Netherlands); and the connections among air pollution, energy systems, and global warming. (Same as Economics 218.)
Prerequisite: Economics 101 or permission of the instructor.
219a - MCSR, INS. Biology of Marine Organisms. Every fall. Amy S. Johnson.
The study of the biology and ecology of marine mammals, seabirds, fish, intertidal and subtidal invertebrates, algae, and plankton. Also considers the biogeographic consequences of global and local ocean currents on the evolution and ecology of marine organisms. Laboratories, field trips, and research projects emphasize natural history, functional morphology, and ecology. Lectures and three hours of laboratory or field trip per week. One weekend field trip included. (Same as Biology 219.)
Prerequisite: Biology 102 or 109.

## Courses of Instruction

225a - MCSR, INS. Biodiversity and Conservation Science. Fall 2011. John Lichter.
People rely on nature for food, materials, medicines, and recreation; yet the fate of Earth's biodiversity is rarely given priority among the many pressing problems facing humanity today. Explores the interactions within and among populations of plants, animals, and microorganisms, and the mechanisms by which those interactions are regulated by the physical and chemical environment. Major themes are biodiversity and the processes that maintain biodiversity, the relationship between biodiversity and ecosystem function, and the science underlying conservation efforts. Laboratory sessions consist of student research, local field trips, laboratory exercises, and discussions of current and classic ecological literature. (Same as Biology 225.)

Prerequisite: Biology 102 or 109, or Environmental Studies 201 (same as Biology 158 and Chemistry 105).
227c - IP. City and Landscape in Modern Europe. Fall 2012. Jill Pearlman.
Explores the evolution of the built environment in London, Paris, Vienna, and Berlin from the mid-nineteenth century to the present. Focusing on significant moments in the history of these cities, considers a variety of factors as determinants of urban form, including technological developments, industrialization, politics, economics, culture and design. Topics include the creation of capital cities, natural and public spaces, streets, housing, suburbanization, environmental problems, and current schemes for a sustainable urbanism. (Same as
History 227.)
228b - MCSR. Natural Resource Economics and Policy. Fall 2012 or Spring 2013. Guillermo Herrera.

A study of the economic issues surrounding the existence and use of renewable natural resources (e.g., forestry/land use, fisheries, water, ecosystems, and the effectiveness of antibiotics) and exhaustible resources (e.g., minerals, fossil fuels, and old growth forest). A basic framework is first developed for determining economically efficient use of resources over time, then extended to consider objectives other than efficiency, as well as the distinguishing biological, ecological, physical, political and social attributes of each resource. Uncertainty, common property, and various regulatory instruments are discussed, as well as alternatives to government intervention and/or privatization. (Same as Economics 228.)
Prerequisite: Economics 101.
[231b. Native Peoples and Cultures of Arctic America. (Same as Anthropology 231.)]
232c - ESD. History of the American West. Fall 2011. Connie Chiang.
Survey of what came to be called the Western United States from the nineteenth century to the present. Topics include Euro-American relations with Native Americans; the expansion and growth of the federal government into the West; the exploitation of natural resources; the creation of borders and national identities; race, class, and gender relations; the influence of immigration and emigration; violence and criminality; cities and suburbs; and the enduring persistence of Western myths in American culture. Students write several papers and engage in weekly discussion based upon primary and secondary documents, art, literature, and film. (Same as History 232.)
[235c - ESD. Borderlands and Empires in Early North America. (Same as History 235 and Latin American Studies 236.)]

240b. Environmental Law and Policy. Fall 2011. Conrad Schneider.
Critical examination of some of the most important American environmental laws and their application to environmental problems that affect the United States and the world. Students learn what the law currently requires and how it is administered by federal and state agencies, and are encouraged to examine the effectiveness of current law and consider alternative approaches.
243c - VPA. Modern Architecture: 1750 to 2000. Spring 2013. Jill Pearlman.
Examines major buildings, architects, architectural theories, and debates during the modern period, with a strong emphasis on Europe through 1900, and both the United States and Europe in the twentieth century. Central issues of concern include architecture as an important carrier of historical, social, and political meaning; changing ideas of history and progress in built form; and the varied architectural responses to industrialization. Attempts to develop students' visual acuity and ability to interpret architectural form while exploring these and other issues. (Same as Art History 243.)
[244c - VPA. City, Anti-City, Utopia: Building Urban America. (Same as History 244.)] 245c - VPA. The Nature of Frank Lloyd Wright. Fall 2011. Jill Pearlman.

An in-depth investigation of the buildings of North America's most celebrated architect, with emphasis on the major theme of his work--the complex relationship between architecture and nature. Examines Wright's key projects for a diverse range of environments and regions while also placing the master builder and his works into a larger historical, cultural, and architectural context. Engages in a critical analysis of the rich historical literature that Wright has evoked in recent decades, along with the prolific writings of the architect himself.

Note: This course counts toward the art history requirement for the visual arts major and minor.

247c. Maine: A Community and Environmental History. Spring 2014. Sarah McMahon.
Seminar. Examines the evolution of various Maine social and ecological communities-inland, hill country, and coastal. Begins with the contact of European and Native American cultures, examines the transfer of English and European agricultural traditions in the seventeenth and eighteenth centuries, and explores the development of diverse geographic, economic, ethnic, and cultural communities during the nineteenth and into the early twentieth centuries. (Same as History 247.)

Prerequisite: One course in history or permission of the instructor.
[250c - ESD. California Dreamin': A History of the Golden State. (Same as History 250.)] 253a. Atmosphere and Ocean Dynamics. Fall 2011. Mark Battle.

A mathematically rigorous analysis of the motions of the atmosphere and oceans on a variety of spatial and temporal scales. Covers fluid dynamics in inertial and rotating reference frames, as well as global and local energy balance, applied to the coupled ocean-atmosphere system.
(Same as Earth and Oceanographic Science 257 and Physics 257.)
Prerequisite: Physics 104 or permission of the instructor.
[258c. Environmental Ethics. (Same as Philosophy 258.)]

Courses of Instruction
263b. International Environmental Policy. Spring 2012. Allen L. Springer.
Examines the political, legal, and institutional dimension of international efforts to protect the environment. Problems discussed include transboundary and marine pollution, maintaining biodiversity, and global climate change. (Same as Government 263.)
[264b. Climate Change and Energy Policy. (Same as Government 264.)]
267a - INS. Coastal Oceanography. Spring 2012. Edward Laine.
Principles and problems in coastal oceanography, with an emphasis on interdisciplinary inquiry. Topics include circulation and sediment transport within estuaries and on the continental shelf, impact of human systems on the marine environment, and issues and controversies of eutrophication and hypoxia in the coastal environment. (Same as Earth and Oceanographic Science 267.)

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
270a. Landscapes and Global Change. Every other spring. Spring 2012. Gabrielle David.
The earth's surface is marked by the interactions of the atmosphere, water and ice, biota, tectonics, and underlying rock and soil. Even familiar landscapes beget questions on how they formed, how they might change, and how they relate to patterns at both larger and smaller scales. Examines earth's landscapes and the processes that shape them, with particular emphasis on how future changes may both influence and be influenced by humans. Topics include specific land-shaping agents (rivers, glaciers, landslides, groundwater), as well as how these agents interact with one another and with changing climate, tectonics, and human activities. (Same as Earth and Oceanographic Science 270.)
Prerequisite: One course in earth and oceanographic science or permission of the instructor.
[271a. Biology of Marine Mammals. (Same as Biology 271.)]
[272b - ESD, IP. The Right to Be Cold: Contemporary Arctic Environmental and Cultural Issues. (Same as Anthropology 272.)]

274a - MCSR, INS. Marine Conservation Biology. Fall 2011. Damon P. Gannon.
Introduces key biological concepts that are essential for understanding conservation issues. Explores biodiversity in the world's major marine ecosystems; the mechanisms of biodiversity loss at the genetic, species, and ecosystem levels; and the properties of marine systems that pose unique conservation challenges. Investigates the theory and practice of marine biodiversity conservation, focusing on the interactions among ecology, economics, and public policy. Consists of lecture/discussion, lab, field trips, guest seminars by professionals working in the field, and student-selected case studies. (Same as Biology 274.)
Prerequisite: One of the following: Biology 154 (same as Environmental Studies 154), Biology 215 (same as Environmental Studies 215), Biology 219 (same as Environmental Studies 219), or Biology 225 (same as Environmental Studies 225), Environmental Studies 101, Environmental Studies 201 (same as Biology 158 and Chemistry 105), or permission of the instructor.

280a. Plant Responses to the Environment. Spring 2013. Barry A. Logan.
Plants can be found growing under remarkably stressful conditions. Even your own backyard poses challenges to plant growth and reproduction. Survival is possible only because of a diverse suite of elegant physiological and morphological adaptations. The physiological ecology of plants from extreme habitats (e.g., tundra, desert, hypersaline) is discussed, along with the
responses of plants to environmental factors such as light and temperature. Readings from the primary literature facilitate class discussion. Excursions into the field and laboratory exercises complement class material. (Same as Biology 280.)

Prerequisite: Biology 210 or $\mathbf{2 2 5}$, or permission of the instructor.
282a - MCSR, INS. Oceans and Climate. Every third fall. Fall 2012. Collin Roesler.
Oceans cover more than 70 percent of the earth's surface. Through the transfer of heat and matter, the oceans drive earth's climate and ultimately life on earth. Students will learn how records of paleoclimates are preserved in deep-sea sediments and glacial ice cores and how natural climate variations can be distinguished from human induced changes. The role of the ocean in buffering increasing heat and carbon in the atmosphere and ocean ecosystem responses to climate perturbations will be explored. Weekly laboratory sessions will be devoted to field trips, laboratory experiments, and computer-based data analysis and modeling to provide hands-on experiences for understanding the time and spaces scales of processes governing oceans, climate, and ecosystems. Earth and Oceanographic Science 200 and Mathematics 161 are recommended. (Same as Earth and Oceanographic Science 282.)

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
[283c. Environmental Education.]
285c. Ecological Thought in Latin American Literature. Fall 2011. Enrique Yepes.
Explores how the radical interconnectedness postulated by ecological thinking can be read in Latin American narrative, essay, film, and poetry from the 1920 s to the present. Includes a review of cultural ecology as well as an overview of environmental history and activism in the region. (Same as Latin American Studies 345 and Spanish 345.)

Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.

287a. Poles Apart: A Comparison of Arctic and Antarctic Environments. Every third fall. Fall 2011. Collin Roesler.

Compares and contrasts the geography, climate, glaciology and sea ice, oceanography, ocean biology, and exploration history of the Arctic and Antarctic regions with particular emphasis on the role of polar regions in global climate change. One weekend field trip required. (Same as Earth and Oceanographic Science 287.)

Prerequisite: One course in earth and oceanographic science or permission of the instructor.
291-294. Intermediate Independent Study in Environmental Studies. The Program.
[301. Environmental Studies Capstone Project.]
302a. Earth Climate History and Its Impacts on Ecosystems and Human Civilizations. Spring 2012. Philip Camill.

The modern world is experiencing rapid climate warming and some parts extreme drought, which will have dramatic impacts on ecosystems and human societies. How do contemporary warming and aridity compare to past changes in climate over the last billion years? Are modern changes human-caused or part of the natural variability in the climate system? What effects did past changes have on global ecosystems and human societies? Students use environmental records from rocks, soils, ocean cores, ice cores, lake cores, fossil plants, and tree rings to assemble proxies of past changes in climate, atmospheric $\mathrm{CO}_{2}$, and disturbance to examine several issues: long-term carbon cycling and climate, major extinction events, the rise of C 4

## Courses of Instruction

photosynthesis and the evolution of grazing mammals, orbital forcing and glacial cycles, glacial refugia and post-glacial species migrations, climate change and the rise and collapse of human civilizations, climate/overkill hypothesis of Pleistocene megafauna, climate variability, drought cycles, climate change impacts on disturbances (fire and hurricanes), and determining natural variability vs. human-caused climate change. One introductory biology (with ecology or evolution focus), chemistry, or earth and oceanographic science course is required. Prior enrollment in a 200 -level ecology or earth and oceanographic science course is recommended. (Same as Biology 302 and Earth and Oceanographic Science 302.)

305a. Environmental Fate of Organic Chemicals. Spring 2012. Dharni Vasudevan.
More than 100,000 synthetic chemicals are currently in daily use. In order to determine the risk posed to humans and ecosystems, we need to understand and anticipate the extent and routes of chemical exposure. Addresses the fate of organic chemicals following their intentional or unintentional release into the environment. Why do these chemicals either persist or break down, and how are they distributed between surface water, ground water, soil, sediments, biota, and air? Analysis of chemical structure used to gain insight into molecular interactions that determine the various chemical transfer and transformation processes, while emphasizing the quantitative description of these processes. (Same as Chemistry 305.)

## Prerequisite: Chemistry 225.

[306a. Advanced Environmental Organic Chemistry. (Same as Chemistry 306.)]
318b. Environmental and Natural Resource Economics. Fall 2012 or Spring 2013. Guillermo Herrera.

Seminar. Analysis of externalities and market failure; models of optimum control of pollution and efficient management of renewable and nonrenewable natural resources such as fisheries, forests, and minerals; governmental vs. other forms of control of common-pool resources; and benefit-cost analysis of policies, including market-based and non-market valuation. Permission of instructor required for students who have credit for Economics 218 (same as Environmental Studies 218) or 228 (same as Environmental Studies 228). (Same as Economics 318.)
Prerequisite: Economics 255 and 257.
321b. The Economics of Land Use, Ecosystem Services, and Biodiversity. Fall 2011. Erik Nelson.

Seminar. Analysis of the economic forces that shape land-use patterns, the relationship between land-use patterns and ecosystem service provision and biodiversity persistence, and the economic value of ecosystem service provision. Investigates methods for increasing ecosystem service values on the landscape and the economic cost of these methods. Analysis of land-use externalities and the failure of land-use patterns to generate maximum societal net benefits; neoclassical economic theory on land-use; methods for estimating market value of land; methods of non-market valuation; efficient land-use patterns from a societal perspective; methods for finding efficient land-use patterns; and governmental and non-governmental organization land conservation programs. Permission of instructor required during add/drop for students who have credit for Economics 218 (same as Environmental Studies 218) or 228 (same as Environmental Studies 228). (Same as Economics 321.)

Prerequisite: Economics 255.

343a. Tectonics and Climate. Every other spring. Spring 2013. Rachel Beane.
Exploration of the complex interactions between tectonics and climate. Discussion of current research is emphasized by reading primary literature, through class discussions and presentations, and by writing scientific essays. The emphasis on current research means topics may vary, but will include topographic growth of mountain belts and Cenozoic climate change. (Same as Earth and Oceanographic Science 343.)

Prerequisite: One 200 -level course in earth and oceanographic science or Earth and Oceanographic Science 357 (same as Environmental Studies 357 and Physics 357).
[349c. The Americas as Crossroads: Transnational Histories. (Same as History 349 and Latin American Studies 349.)]
[357a. The Physics of Climate. (Same as Earth and Oceanographic Science 357 and Physics 357.)]

363b. Advanced Seminar in International Relations: Law, Politics, and the Search for Justice. Spring 2012. Allen L. Springer.

Examines the complex relationship between law and policy in international relations by focusing on two important and rapidly developing areas of international concern: environmental protection and humanitarian rights. Fulfills the environmental studies senior seminar requirement. (Same as Government 363.)
375. Feeding the World: The Nature and Challenges of Our Food and Agricultural Systems. Spring 2012. Philip Camill.

Although we live in a world where global food abundance is at record highs, and prices are at historic lows, our modern food system has its share of challenges. Methods of food production, marketing, distribution, and consumption have spawned waves of criticism, including concerns about farm economics, food justice, worker safety, animal welfare, famine, ecological degradation, climate change, biotechnology, and public health. In the wake of these challenges, alternative systems of food production, distribution, and consumption are beginning to emerge. An interdisciplinary exploration of three questions: How do we produce and eat food? What major social and environmental consequences have arisen from food production and consumption? What should we produce and eat? Examines the historical origins agriculture, social and environmental problems arising from these transitions, and social movements oriented towards making our food system more ecologically sustainable and socially just. Current or prior enrollment in Environmental Studies 201, 202, and 203 is recommended.

Prerequisite: Environmental Studies 101 or permission of the instructor.
[391. Troubled Waters: Fishing in the Gulf of Maine.]
[392c. Advanced Topics in Environmental Philosophy. (Same as Philosophy 392.)]
394a. Ecological Recovery of Maine's Coastal Ecosystems. Fall 2011. John Lichter.
Maine's coastal ecosystems once supported prodigious abundances of wildlife that supported human communities for millennia before succumbing to multiple anthropogenic stresses in the mid-twentieth century. Today, we need to understand the most pressing ecological and social constraints limiting recovery of these once vital ecosystems to achieve sustainable ecological recovery and provision of ecosystem services. Objective is to better understand the biophysical

## Courses of Instruction

and social constraints limiting ecological recovery, and to rethink the failed management policies of the past. Students participate in a thorough review of the relevant scientific and historical literature and conduct a group study investigating some aspect of the ecology and/or the environmental history of Maine's coastal ecosystems. (Same as Biology 394.)

Prerequisite: Biology 215 (same as Environmental Studies 215), 219 (same as Environmental Studies 219), or 225 (same as Environmental Studies 225); or Environmental Studies 201 (same as Biology 158 and Chemistry 105).
[395b. Advanced Seminar in Environmental Policy and Politics. (Same as Government 395.)]
397a. Advanced Winter Field Ecology. Spring 2012. Nathaniel T. Wheelwright.
Exploration of advanced concepts in ecology and evolutionary biology, and the natural history of plants, animals, and ecosystems in winter in Maine. Structured around group research projects in the field. Each week, field trips focus on a different study site, set of questions, and taxon (e.g., host specificity in wood fungi, foraging behavior of aquatic insects under the ice, estimation of mammal population densities, winter flocking behavior in birds). Students learn to identify local winter flora and fauna, critically evaluate readings from the primary literature, analyze data from field research projects, and present their results each week in a research seminar. Required field trip to the Bowdoin Scientific Station on Kent Island. (Same as Biology 397.)

Prerequisite: Biology 215 (same as Environmental Studies 215) or 258, or permission of the instructor.
398c. The City since 1960. Spring 2012. Jill Pearlman.
Seminar. Explores the history of the North American city from the end of urban renewal to the age of climate change. Focused thematically, topics include the fall of the postwar city and the rise of urban complexity; gentrification and its effects; changing ideals of historic preservation; monuments and sites of memory; urban disasters and their aftermaths; and the brief history of the sustainable city. Culminates in an original research paper, based on primary and secondary source materials.

401-404. Advanced Independent Study and Honors in Environmental Studies. The Program.
The following courses count toward the requirements of the Interdisciplinary Science Concentration, in addition to ES courses designated with an " a ":

Chemistry 210a - MCSR, INS. Chemical Analysis. Every fall. Elizabeth A. Stemmler.
Chemistry 240a - MCSR, INS. Inorganic Chemistry. Every spring. Jeffrey K. Nagle.
The art department invites Art/Environmental Studies independent studies. Contact art department faculty or the environmental studies program director.
Students may also choose from the following list of courses to satisfy requirements for the major in environmental studies. These courses will receive environmental studies credit with the approval of the director after consultation with the student and the instructor. It is expected that a substantial portion of the student's research efforts will focus on the environment. In addition to the courses listed below, students may discuss other possibilities
with the Environmental Studies Program. For full course descriptions and prerequisites, see the appropriate department listings.

Social Sciences
Anthropology 102b. Introduction to World Prehistory. Spring 2012. Scott MacEachern. [Anthropology 221b - ESD. The Rise of Civilization.]

## Film Studies

Tricia Welsch, Department Cbair<br>TBA, Department Coordinator<br>Associate Professor: Tricia Welsch

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

## Requirements for the Minor in Film Studies

The minor consists of five courses, four of which must be courses offered by the Department of Film Studies. One course must come from another department's offerings, and at least one course must be at the 300 level or be an independent study. No more than two courses below the 200 level (including Film Studies 101) will count toward the minor. Courses that will count toward the minor must be taken on a graded basis (not Credit/D/Fail), and students must earn grades of C - or better in these courses.

## Required Courses:

## Film Studies 101

Film Studies 201 or Film Studies 202 (both 201 and 202 may be counted toward the minor)

## Pre-approved Courses Outside the Film Studies Department:

A wide variety of courses available at Bowdoin may count toward a minor in film studies. Such courses must concentrate on film for the major part of their curriculum. Students wishing to have a particular course considered toward the minor should submit supporting materials from the course (such as syllabus, reading list, and assignments) to the chair of the Department of Film Studies. The Asian Studies Program, Gender and Women's Studies Program, and Departments of Romance Languages and German frequently offer courses that qualify.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
10c. Cultural Difference and the Crime Film. Fall 2011. Tricia Welsch.
[29c. Historians, Comediennes, Storytellers: Women Filmmakers in the GermanSpeaking Countries. (Same as Gay and Lesbian Studies 29, Gender and Women's Studies 29, and German 29.)]

## Courses of Instruction

## Introductory, Intermediate, and Advanced Courses

101c - VPA. Film Narrative. Every other year. Fall 2012. Tricia Welsch.
An introduction to a variety of methods used to study motion pictures, with consideration given to films from different countries and time periods. Examines techniques and strategies used to construct films, including mise-en-scène, editing, sound, and the orchestration of film techniques in larger formal systems. Surveys some of the contextual factors shaping individual films and our experiences of them (including mode of production, genre, authorship, and ideology). No previous experience with film studies is required. Attendance at weekly evening screenings is required.

201c - VPA. History of Film I, 1895 to 1935. Every other fall. Fall 2011. Tricia Welsch.
Examines the development of film from its origins to the American studio era. Includes early work by the Lumières, Méliès, and Porter, and continues with Griffith, Murnau, Eisenstein, Chaplin, Keaton, Stroheim, Pudovkin, Lang, Renoir, and von Sternberg. Special attention is paid to the practical and theoretical concerns over the coming of sound. Attendance at weekly evening screenings is required.

202c - VPA. History of Film II, 1935 to 1975. Every other spring. Spring 2012. Tricia Welsch.
A consideration of the diverse production contexts and political circumstances influencing cinema history in the sound era. National film movements to be studied include Neorealism, the French New Wave, and the New German Cinema, as well as the coming of age of Asian and Australian film. Also explores the shift away from studio production in the United States, the major regulatory systems, and the changes in popular film genres. Attendance at weekly evening screenings is required.

222c - VPA. Images of America. Spring 2013. Tricia Welsch.
Explores American culture and history by looking at studio- and independently-produced films. Topics include sex and race relations; ethnicity and the American Dream; work and money and their role in self-definition; war and nostalgia; and celebrity and the role of Hollywood in the national imagination. Attendance at weekly evening screenings is required.

Prerequisite: One of the following: Film Studies 101, 201, or 202.

## [252c - VPA. British Film.]

254c - IP, VPA. Transnational Chinese Cinema. Fall 2012. Shu-chin Tsui.
Introduces students to films produced in the People's Republic of China, Taiwan, and Hong Kong. Places national cinema in a transnational framework and explores how cinema as a sign system constructs sociocultural and aesthetic meanings. Students will benefit most by bringing both an open mind toward non-Western cultural texts, and a critical eye for visual art. (Same as Asian Studies 254.)
[261c - ESD. Gender, Film, and Consumer Culture. (Same as Gender and Women's Studies 261.)]

291c-294c. Intermediate Independent Study in Film Studies. The Department.
310c. Gay and Lesbian Cinema. Spring 2013. Tricia Welsch.
Considers both mainstream and independent films made by or about gays and lesbians. Four intensive special topics each semester, which may include classic Hollywood stereotypes and euphemisms; the power of the box office; coming of age and coming out; the social
problem film; key figures; writing history through film; queer theory and queer aesthetics; revelation and revaluations of film over time; autobiography and documentary; the AIDS imperative. Writing intensive; attendance at evening film screenings is required. (Same as Gay and Lesbian Studies 310 and Gender and Women's Studies 310.)

Prerequisite: One course in film studies or permission of the instructor.
[321c. German Expressionism and Its Legacy.]
322c. Film and Biography. Spring 2012. Tricia Welsch.
Explores how filmmakers have constructed public history through films professing to tell life stories of important individuals. Examines the biopic as a significant and long-lived genre, looks at issues of generic change and stability, and considers the narrative process in relation to historic events and individuals. Attendance at weekly evening screenings is required.
Prerequisite: Film Studies 101, 201, or 202.
333c. The Films of John Ford. Fall 2012. Tricia Welsch.
Examines the films of John Ford, from the silent period to the 1960s. Considers his working methods and visual composition, as well as consistent themes and characterizations. Investigates Ford's reputation in light of shifting American cultural values. Attendance at weekly evening screenings is required.

Prerequisite: Film Studies 101, 201, or 202.
401c-404c. Advanced Independent Study in Film Studies. The Department.

## First-Year Seminars

The First-Year Seminar program is designed to help introduce students to what it means to undertake serious intellectual work at the college level. The seminars provide small class settings where students can engage with a particular topic, a professor, and their peers. They provide an opportunity for in-depth study of a subject of mutual interest, as well as a place to develop college level skills of critical thinking, both reading and writing. The development of such skills is a central feature of first-year seminars. Approaches to this vary, as do the norms of academic writing being taught. All first-year seminars, however, involve frequent writing practice, individualized feedback on writing, and an assignment structure that teaches students how to draft and revise. Additionally, the seminars provide both an introduction to library research and an overview of the expectations of academic honesty and citing sources. This opportunity to learn and practice academic writing is both an independent goal of first-year seminars, and an additional means through which faculty can introduce their discipline and help students to engage with a particular subject matter.
Each year a number of departments offer first-year seminars. Enrollment in each is limited to sixteen students. Sufficient seminars are offered to ensure that every first-year student has the opportunity to participate during at least one semester of the first year. Registration for the seminars takes place before registration for other courses, to facilitate scheduling. A complete listing of first-year seminars being offered in the 2011-2012 academic year follows.
Africana Studies 10b. Racism. Fall 2011. Spring 2012. Roy Partridge.
Examines issues of racism in the United States, with attention to the social psychology of racism, its history, its relationship to social structure, and its ethical and moral implications. (Same as Sociology 10.)

Africana Studies 12c. Affirmative Action and United States Society. Fall 2011. Brian Purnell.

Interdisciplinary exploration of the rise and fall (and reappearance) of the "affirmative action debate" that shaped so much of the American "culture wars" during the 1970s-2000s. Students primarily study affirmative action in the United States, but there will also be comparative analysis of "affirmative action" systems in societies outside the United States, such as South Africa and India. Examines important Supreme Court cases that have shaped the contours of affirmative action, the rise of "diversity" discourse, and the different ways political and cultural ideologies, not to mention historical notions of American identity, have determined when, where, and how affirmative action has existed, and whom it benefits. Through examination of law, economics, sociology, anthropology, history, and political science, introduces students to different methodological approaches that inform Africana Studies and that field's examination of the role people of African descent have played in contemporary and historical American society. Writing intensive. Analytical discussions of assigned texts.
[Africana Studies 13c. From Montezuma to Bin Laden: Globalization and Its Critics. (Same as History 16.)]

Africana Studies 14c. African American Writers and the Short Story. Fall 2011. Guy Mark Foster.

Examines the contributions that African American writers have made to the short story genre from the late nineteenth century to the present. Explores the narrative strategies authors have used in this idiosyncratic form to portray black women and men as subjects of modernity and not merely its objects. Readings include early works by W. E. B. Du Bois, Langston Hughes, Zora Neale Hurston, as well as more recent works by ZZ Packer, Edward P. Jones, and Andrea Lee. (Same as English 12 and Gender and Women's Studies 14.)
[Africana Studies 25c. The Civil War in Film. (Same as History 25.)]
Anthropology 19b. Archaeology: Rethinking the Past. Fall 2011. Leslie Shaw.
Archaeologists unearth information that can be used to explore how the past continues to shape the modern discourse on human variation and cultural difference. Archaeological excavations can provide new insights about people without written histories, or expose human actions that were overlooked by historians or anthropologists. Case studies from North America include a reexamination of English and Native American interactions during the settlement of Jamestown in 1607, a new look at eighteenth-century racial tensions through the excavations at the New York African Burial Ground, and a look at poverty and labor in the nineteenth-century factories of Lawrence, Massachusetts.

Art History 11c. Visual Strategies of Holocaust Remembrance. Fall 2011. Natasha Goldman.

Since 1945, memorials, works of art in public space, and museums have been dedicated to remembering the Holocaust. Examines works of art and museums produced in, among other countries, Germany, Israel, Poland, and the United States. Nathan Rapoport's Warsaw Ghetto Monument in Poland, Peter Eisenman's Holocaust Memorial in Berlin, and the United States Holocaust Memorial Museum in Washington, D.C., among other sites, will be addressed. Historical and art historical context, as well as theories of memory and trauma, provide lenses through which works will be interpreted. A range of stylistic approaches of memorials, including representational, abstract, minimal, conceptual, postmodern, and new media art, explained and explored. Two field trips include visits to the Boston Holocaust Memorial and the Holocaust and Human Rights Center in Augusta, Maine.

## [Asian Studies 11c. Living in the Sixteenth Century. (Same as History 13.)]

## Asian Studies 15c. Orphans of Asia. Fall 2011. Belinda Kong.

Orphans populate the worlds of Asian diaspora literature, roaming the landscapes of precommunist Shanghai as much as post-9/11 New York City, the wartime internment camps of Japanese Canadians and postwar military camp towns of Korea as much as present-day Hong Kong and a futuristic Los Angeles. Explores the orphan figure in contemporary Asian American, Canadian, and British fiction written in English, in relation to contexts of war, colonialism, neoimperialism, multiculturalism, and globalization. Authors may include Chieh Chieng, Kazuo Ishiguro, Cynthia Kadohata, Nora Okja Keller, Suki Kim, Joy Kogawa, Wendy Law-Yone, Indra Sinha, and Wu Zhuoliu. (Same as English 15.)

Asian Studies 19b. East Asian Politics: Introductory Seminar. Fall 2011. Henry C. W. Laurence.

Surveys the diverse political, social, and economic arrangements across East Asia. China, Japan, and North and South Korea are the main focus, but attention is also paid to the other countries in the region. Examines the relationship between democracy and economic change in East Asia, and asks if the relationship is different in Asia than elsewhere in the world. Other questions include: Are there common "Asian values" and if so, what are they? What is the role of Confucianism in shaping social, political, and economic life in the region? How are economic and technological developments affecting traditional social institutions such as families? How is the status of women changing? What lies ahead for Asia? (Same as Government 19.)

Asian Studies 21c. Perspectives on Modern China. Fall 2011. Shu-chin Tsui.
Explores the changing nature of modern China from interdisciplinary perspectives: history, literature, documentary films, and cultural studies. Taking history as the primary framework and written/visual representations as analytical texts, investigates the process of nationbuilding and destruction throughout the nineteenth and twentieth centuries. Central questions concern how various social movements and historical events transformed modern China. Also considers how cultural productions and representations shape, as well as reflect, changing notions of China's national identity.
[Asian Studies 26c. Globalizing India. (Same as History 26.)]

## [Biology 23a. Personal Genomes.]

Biology 25a. Venoms and Toxins. Fall 2011. Glen Ernstrom.
A seminar that explores the paradox of how venoms and toxins can be dangerous and beneficial to human health and society. Controversies and problems that surround their study and use explored through readings and discussions.

Chemistry 11a. Great Issues in Science. Fall 2011. Daniel M. Steffenson.
Presents a realistic and mature picture of science and the methods employed by current scientists to provide acceptable justifications for scientific hypotheses and theories. Starting with the invention of science by the ancient Greek philosophers (Lucretius, On the Nature of Things) and using historical examples from various sciences, three philosophical models of justification examined in detail: logical empiricism (the Vienna Circle), Fallibilism (Popper), and Conventionalism (Kuhn). Several literary images of science (Vonnegut, Brecht, Pynchon, Crichton) are compared to the philosophical models. Examines the role of scientists in making certain value judgments such as organ transplants or stem cell research.

## Courses of Instruction

[Classics 11c. Shame, Honor, and Responsibility.]

Classics 12c. Discovering Homer. Fall 2011. Cassandra Borges.
An introduction to two of the most important texts from Greek antiquity: Homer's Iliad and Odyssey. Explores the themes of sacrifice, divine and human relationships, and recognition in both poems. Topics include the nature of Homeric composition and the translation, interpretation, and transformation of Homer by later Greek and Roman authors such as Sappho, Herodotus, Ovid, and Lucian.

## [Classics 18c. Cleopatra: Versions and Visions.]

Economics 18b. The Art of the Deal: Commerce and Culture. Fall 2011. B. Zorina Khan.
Explores the economics of culture, including the analysis of markets for art, music, literature, and movies. If culture is "priceless," then why do artists starve while providers of pet food make billions? Why are paintings by dead artists generally worth more than paintings by living artists? Could music piracy on the information superhighway benefit society? Can Tom Hanks turn a terrible movie into a contender at the box office? Students are not required to have any prior knowledge of economics, and will not be allowed to argue that baseball comprises culture.

Education 20c. The Educational Crusade. Fall 2011. Charles Dorn.
Why do you go to school? What is the central purpose of public education in the United States? Should public schools prepare students for college? The workforce? Competent citizenship? Who makes these decisions and through what policy process are they implemented? Explores the ways that public school reformers have answered such questions, from the "Common School Crusaders" of the early nineteenth century to present advocates of "No Child Left Behind." Examining public education as both a product of social, political, and economic change and as a force in molding American society, highlights enduring tensions in the development and practice of public schooling in a democratic republic.

## English 10c. Shakespeare's Afterlives. Fall 2011. Aaron Kitch.

Romeo and Juliet as garden gnomes, Richard III as Adolf Hitler, King Lear as aging patriarch of an lowa family farm...these are some of the ways that Shakespeare's plays and characters have been adapted over the centuries. Reading plays from representative genres together with their adaptations, we examine the aesthetic, cultural, and political transformations of the Bard in prose, film, and other mediums. Readings include Oscar Wilde, Tom Stoppard, Jane Smiley, Marjorie Garber, and Arthur Philips, with a film by John Madden (Shakespeare in Love).

## English 11c. Sleeping with the Enemy: Representing Violence against Women. Fall

 2011. Samaa Abdurraqib.Violence against women is ubiquitous (sexual violence, physical violence, verbal abuse) and we see it in a variety of representational forms: film, music videos, and advertising, for example. Focuses on how different genres represent violence against women, primarily in novels, poetry, memoirs, and film. Considers these texts in a broader cultural context, one in which objectification of women and violence against women occurs on a regular basis. Looks at the ways that these representations may be working to counter the cultural phenomenon of gendered violence and examines the risks of presenting fictional depictions of violence. Includes reading and watching explicit representations of violence and dealing with very difficult subject matter. (Same as Gender and Women's Studies 11.)

English 12c. African American Writers and the Short Story. Fall 2011. Guy Mark Foster.
Examines the contributions that African American writers have made to the short story genre from the late nineteenth century to the present. Explores the narrative strategies authors have used in this idiosyncratic form to portray black women and men as subjects of modernity and not merely its objects. Readings include early works by W. E. B. Du Bois, Langston Hughes, Zora Neale Hurston, as well as more recent works by ZZ Packer, Edward P. Jones, and Andrea Lee. (Same as Africana Studies 14 and Gender and Women's Studies 14.)
English 13c. Hawthorne. Fall 2011. William Watterson.
Readings include selected short stories, Fanshawe, The Scarlet Letter, The Blithedale Romance, The House of the Seven Gables, The Marble Faun, Septimus Felton, and James Mellow's Nathaniel Hawthorne in His Times.

English 14c. Modern American Poets. Fall 2011. Celeste Goodridge.
Close analysis of the work of three seminal American poets: Robert Frost, William Carlos Williams, and Wallace Stevens.

## English 15c. Orphans of Asia. Fall 2011. Belinda Kong.

Orphans populate the worlds of Asian diaspora literature, roaming the landscapes of precommunist Shanghai as much as post- $9 / 11$ New York City, the wartime internment camps of Japanese Canadians and postwar military camp towns of Korea as much as present-day Hong Kong and a futuristic Los Angeles. Explores the orphan figure in contemporary Asian American, Canadian, and British fiction written in English, in relation to contexts of war, colonialism, neoimperialism, multiculturalism, and globalization. Authors may include Chieh Chieng, Kazuo Ishiguro, Cynthia Kadohata, Nora Okja Keller, Suki Kim, Joy Kogawa, Wendy Law-Yone, Indra Sinha, and Wu Zhuoliu. (Same as Asian Studies 15.)

## English 16c. Fan Fictions and Cult Classics. Fall 2011. Megan Cook.

Looks closely at a series of texts that have inspired especially ardent responses among readers over the centuries. Readings may include Chaucer's Canterbury Tales, Shakespeare's Hamlet, Austen's Emma, and Sir Arthur Conan Doyle's Sherlock Holmes stories, as well as later texts that appropriate, reimagine, and extend these canonical narratives. Considers how the contemporary notion of a "fan," an ardent admirer who seems in many ways the opposite of the judgmental critic, can enrich our understanding of literary influence and appreciation. Students compose and revise a number of critical essays and should also come prepared to think and write creatively about the texts studied.

## English 17c. Animal Life. Fall 2011. Hilary Thompson.

Explores the ways in which the figure of the animal serves as both a point of analogy and opposition to the concept of the human, and thus has been crucial for our definitions of human life. Focusing on contemporary world literature, investigates the fantastic images and ethical quandaries that are unleashed when the dividing boundaries between human and animal life lapse. Authors may include J. M. Coetzee, Philip K. Dick, Italo Calvino, Haruki Murakami.
English 18c. My Old School: Life, Literature, and College. Fall 2011. Brock Clarke.
Examines fiction that in some ways suggests what we do, or do not, learn in school ("school" in this case mostly, but not entirely, meaning "college"). Considers what it is we hope to get out of school, and what it hopes to get out of us; and what we hope to get out of literature, and what literature gives to, and takes from, us. Authors include Plato, Muriel Spark, Richard Russo, Sam Lipsyte, Kazuo Ishiguro, Ralph Ellison, and others.

English 20c. Ghosts. Spring 2012. Aviva Briefel.
Explores "actual" and metaphorical instances of ghosts in nineteenth- and twentieth-century literary and cinematic contexts. Considers genres such as the Victorian ghost story, the gothic novella, and the horror film to grasp the various significations of a figure that is often defined by its ungraspability. Also introduces students to critical literature on ghosts. May include writings by Charles Dickens, Arthur Conan Doyle, Sigmund Freud, and Henry James, as well as films by Alejandro Amenábar, Alfred Hitchcock, M. Night Shyamalan, and Robert Wise.
English 21c. Of Comics and Culture. Spring 2012. Elizabeth Muther.
An introduction to comics, graphic narratives, and "sequential art." Explores elements of the history of the comics-especially in a United States cultural context-while examining the formal dimensions of this hybrid art. Considers the cultural functions of this work in theoretical terms, as well as the sociology of its reception. Examines comics as personal narrative, social criticism, political commentary, fantasy, and science fiction, among other modes. Special focus on the functions of humor, irony, pathos, and outrage, as deployed in historical and contemporary comic forms.

## English 22c. Transfigurations of Song. Spring 2012. David Collings.

A course in close reading. Explores poetry, primarily in the Romantic tradition, which dallies with the dangers of lyrical transport, whether in the form of fusion with the divine, aesthetic seduction, impossible quest, or physical transfiguration. Authors may include Coleridge, Wordsworth, Keats, Tennyson, Yeats, Crane, and Stevens.

## Environmental Studies 12c. Campus: Architecture and Education in the American

 College, 1800-2000. Fall 2011. Jill Pearlman.Explores the changing environment of the American college and university campus from its beginnings in colonial times to today. At once a history of the built environment-architecture, planning, and design-and of the ideals of higher education embodied in that environment, examines a range of academic landscapes, from liberal arts colleges, to research universities and urban campuses. Focuses on developing skills in visual and textual analysis, historical research, and on understanding the Bowdoin campus.

## [Environmental Studies 15c. Frontier Crossings: The Western Experience in American History. (Same as History 15.)]

Film Studies 10c. Cultural Difference and the Crime Film. Fall 2011. Tricia Welsch.
Considers the gangster film in depth, and explores how popular narrative film has managed the threat posed by the criminal's difference-racial, ethnic, or gender-over time. Examines shifts in the genre's popularity from the silent era to the present day, theories of generic change, and the implications of considering genre entertainment art. Attendance at weekly evening screenings is required.
[Film Studies 29c. Historians, Comediennes, Storytellers: Women Filmmakers in the German-Speaking Countries. (Same as Gay and Lesbian Studies 29, Gender and Women's Studies 29, and German 29.)]
[Gay and Lesbian Studies 16c. Sex and the Church. (Same as Gender and Women's Studies 17 and Religion 16.)]

[^1]Gender and Women's Studies 11c. Sleeping with the Enemy: Representing Violence against Women. Fall 2011. Samaa Abdurraqib.

Violence against women is ubiquitous (sexual violence, physical violence, verbal abuse) and we see it in a variety of representational forms: film, music videos, and advertising, for example. Focuses on how different genres represent violence against women, primarily in novels, poetry, memoirs, and film. Considers these texts in a broader cultural context, one in which objectification of women and violence against women occurs on a regular basis. Looks at the ways that these representations may be working to counter the cultural phenomenon of gendered violence and examines the risks of presenting fictional depictions of violence. Includes reading and watching explicit representations of violence and dealing with very difficult subject matter. (Same as English 11.)
Gender and Women's Studies 14c. African American Writers and the Short Story. Fall 2011. Guy Mark Foster.

Examines the contributions that African American writers have made to the short story genre from the late nineteenth century to the present. Explores the narrative strategies authors have used in this idiosyncratic form to portray black women and men as subjects of modernity and not merely its objects. Readings include early works by W. E. B. Du Bois, Langston Hughes, Zora Neale Hurston, as well as more recent works by ZZ Packer, Edward P. Jones, and Andrea Lee. (Same as Africana Studies 14 and English 12.)
[Gender and Women's Studies 17c. Sex and the Church. (Same as Gay and Lesbian Studies 16 and Religion 16.)]

Gender and Women's Studies 20c. In Sickness and in Health: Public Health in Europe and the United States. Spring 2013. Susan Tananbaum.

Introduces a variety of historical perspectives on illness and health. Considers the development of scientific knowledge, and the social, political, and economic forces that have influenced public health policy. Topics include epidemics, maternal and child welfare, AIDS, and national health care. (Same as History 20.)

Gender and Women's Studies 22c. "Bad" Women Make Great History: Gender, Identity, and Society in Modern Europe, 1789-1945. Fall 2011. Page Herrlinger.

Focuses on the lives and works of path-breaking women who defied the norms of modern European society in order to assume extraordinary and often controversial identities in a range of fields-as writers, scientists, performers, athletes, soldiers, and social and political activists. What does each woman's "deviance" reveal about cultural constructions of identity and the self in Modern Europe? About contemporary views on issues such as women's work, gender relations, education, marriage, sexuality, motherhood, health, and the struggle for civil and political rights? And when studied together, what do these women's experiences tell us about patterns of change and continuity with respect to definitions of masculinity vs. femininity, the public vs. private sphere, and the relationship of the individual to the modern state? (Same as History 22.)
[Gender and Women's Studies 29c. Historians, Comediennes, Storytellers: Women Filmmakers in the German-Speaking Countries. (Same as Film Studies 29, Gay and Lesbian Studies 29, and German 29.)]
[German 29c. Historians, Comediennes, Storytellers: Women Filmmakers in the German-Speaking Countries. (Same as Film Studies 29, Gay and Lesbian Studies 29, and Gender and Women's Studies 29.)]

Government 10b. The Pursuit of Peace. Fall 2011. Allen L. Springer.
Examines different strategies for preventing and controlling armed conflict in international society, and emphasizes the role of diplomacy, international law, and international organizations in the peace-making process.

Government 11b. The Korean War. Fall 2011. Christian P. Potholm.
The Korean War is often called "the forgotten war" because it is overshadowed by World War II and the Vietnam War, yet many important aspects and results of it are mirrored in the contemporary world. Korea is still divided and its situation as a buffer state between China, Russia, and Japan continues to have important policy ramifications for the United States. Focuses not just on the course of the war, but on the foreign policy assumptions of the two Korean governments, the United States, the People's Republic of China, and Russia.
[Government 18b. NGOs in Politics.]
Government 19b. East Asian Politics: Introductory Seminar. Fall 2011. Henry C. W. Laurence.

Surveys the diverse political, social, and economic arrangements across East Asia. China, Japan, and North and South Korea are the main focus, but attention is also paid to the other countries in the region. Examines the relationship between democracy and economic change in East Asia, and asks if the relationship is different in Asia than elsewhere in the world. Other questions include: Are there common "Asian values" and if so, what are they? What is the role of Confucianism in shaping social, political, and economic life in the region? How are economic and technological developments affecting traditional social institutions such as families? How is the status of women changing? What lies ahead for Asia? (Same as Asian Studies 19.)

Government 21b. Citizenship and Representation in American Politics. Fall 2011. Michael M. Franz.

Examines the issues of citizenship and representation in American politics. What does it mean to be a democratic citizen in the United States? Are we granted only rights, but no responsibilities? Or does citizenship demand that we take some active interest in our political life? Considers what it means for elected representatives to represent constituents. How do we know if our political system is accurately reflecting the interests of its citizens? When is an elected leader doing his or her job well? What evidence can we use to answer such questions?
Government 25b. American Politics: Representation, Participation, and Power. Fall 2011. Janet M. Martin.

An introductory seminar in American national politics. Readings, papers, and discussion explore the changing nature of power and participation in the American polity, with a focus on the interaction between individuals (non-voters, voters, party leaders, members of Congress, the President) and political institutions (parties, Congress, the executive branch, the judiciary). Not open to students who have credit for or are concurrently taking Government 150.
Government 26b. Fundamental Questions: Exercises in Political Theory. Fall 2011. Jean M. Yarbrough.

Explores the fundamental questions in political life: What is justice? What is happiness? Are human beings equal or unequal by nature? Do they even have a nature, or are they "socially constructed"? Are there ethical standards for political action that exist prior to law and, if so,
where do they come from? Nature? God? History? Readings may include Plato, the Bible, Machiavelli, Shakespeare, Marx, Mill, and Nietzsche.
Government 28b. Human Being and Citizen. Fall 2011. Paul N. Franco.
An introduction to the fundamental issues of political philosophy: human nature, the relationship between individual and political community, the nature of justice, the place of virtue, the idea of freedom, and the role of history. Readings span both ancient and modern philosophical literature. Authors may include Plato, Aristotle, Hobbes, Locke, Rousseau, the American Founders, Tocqueville, Mill, and Nietzsche.
[History 10c. Monsters, Marvels, and Messiahs: Europe during the Age of Discovery.]
History 11c. Memoirs and Memory in American History. Fall 2011. Connie Chiang.
Examines the ways in which Americans have remembered the past and documented their experiences in individual memoirs. Considers the tensions between memory and history, the value of memoirs as historical documents, and the extent to which memories deepen, complicate, and even convolute our understanding of twentieth-century United States history. The topical focus of the seminar will vary from year to year and may include immigration, labor, gender and race relations, and war. Writing-intensive, including several short papers and a family history research paper.

History 12c. Utopia: Intentional Communities in America, 1630-1997. Fall 2012. Sarah McMahon.

An examination of the evolution of utopian visions and utopian experiments that begins in 1630 with John Winthrop's "City upon a Hill," explores the proliferation of both religious and secular communal ventures between 1780 and 1920, and concludes with an examination of twentieth-century counterculture communes, intentional communities, and dystopian separatists. Readings include primary source accounts by members (letters, diaries, essays, etc.), "community" histories and apostate exposés, utopian fiction, and scholarly historical analyses. Discussions and essays focus on teaching students how to subject primary and secondary source materials to critical analysis.
[History 13c. Living in the Sixteenth Century. (Same as Asian Studies 11.)]
History 14c. Science and Society. Fall 2011. David Hecht.
Focuses on twentieth-century science, technology, and medicine. Uses a number of seminal events and ideas-evolution, nuclear weapons, environmentalism, genetics, climate change, and public health-to examine changing meanings of "science." Science is neither as objective nor as detached from society as is commonly assumed; examines the nature of its interaction with broader themes and events in twentieth-century American politics and culture.
[History 15c. Frontier Crossings: The Western Experience in American History. (Same as Environmental Studies 15.)]
[History 16c. From Montezuma to Bin Laden: Globalization and Its Critics. (Same as
Africana Studies 13.)]
History 18c. The Consumer Revolution in the Atlantic World. Fall 2011 and Fall 2012. Meghan Roberts.

Examines the social, cultural, and political dimensions of consumerism in early modern Europe and the Atlantic world. During the eighteenth century, ordinary individuals engaged in a buying frenzy to decorate their homes and their persons in evermore ornate fashions.

## Courses of Instruction

Considers how material culture provides a lens through which we can view the connections between empire and metropole in the early modern world; how it produced and reflected changing gender norms; how the growth of European consumerism was supported by slave labor, and how all of the above shaped and was shaped by the political revolutions of the late eighteenth century.

## History 20c. In Sickness and in Health: Public Health in Europe and the United States.

 Spring 2013. Susan Tananbaum.Introduces a variety of historical perspectives on illness and health. Considers the development of scientific knowledge, and the social, political, and economic forces that have influenced public health policy. Topics include epidemics, maternal and child welfare, AIDS, and national health care. (Same as Gender and Women's Studies 20.)

History 22c. "Bad" Women Make Great History: Gender, Identity, and Society in Modern Europe, 1789-1945. Fall 2011. Page Herrlinger.

Focuses on the lives and works of path-breaking women who defied the norms of modern European society in order to assume extraordinary and often controversial identities in a range of fields-as writers, scientists, performers, athletes, soldiers, and social and political activists. What does each woman's "deviance" reveal about cultural constructions of identity and the self in Modern Europe? About contemporary views on issues such as women's work, gender relations, education, marriage, sexuality, motherhood, health, and the struggle for civil and political rights? And when studied together, what do these women's experiences tell us about patterns of change and continuity with respect to definitions of masculinity vs. femininity, the public vs. private sphere, and the relationship of the individual to the modern state? (Same as Gender and Women's Studies 22.)
[History 25c. The Civil War in Film. (Same as Africana Studies 25.)]
[History 26c. Globalizing India. (Same as Asian Studies 26.)]
Philosophy 16c. Personal Ethics. Fall 2011. Matthew Stuart.
Examines some ethical problems and paradoxes that arise in ordinary life, some philosophical theories that bear upon them, and some strategies for making thoughtful decisions about them. Topics may include friendship, lying, love, family obligations, charity, the treatment of animals, abortion.

Psychology 10b. What's on Your Mind? An Introduction to the Brain and Behavior. Fall 2011. Lisa A. Mangiamele.

A general introduction to the science of psychology, with a specific emphasis on the brain's control of human and animal behavior. Uses historical texts, "popular" science books, and primary literature to explore the mind-body connections within topics such as learning and memory, perception, development, stress, social behavior, personality, and choice.

## [Religion 10c. Seeking a Historical Jesus.]

Religion 14c. Heresy and Orthodoxy. Fall 2011. Jorunn Buckley.
This writing-intensive course focuses on readings in heretical texts, orthodox creeds, and scholarly treatments of the religious-ideological construction of heresy and orthodoxy. Fundamentally, heresy is dangerous precisely because of its proximity to orthodoxy. Examples focus on Jewish, Christian, and Islamic traditions; attention given to categories such as dogma vs. freedom, pure vs. impure, society vs. individual. Facets of present-day debates on fundamentalism included.
[Religion 16c. Sex and the Church. (Same as Gay and Lesbian Studies 16 and Gender and Women's Studies 17.)]
[Religion 25c. The Islamic Revolution of Iran.]
Religion 27c. Astral Religion in the Near East and Classical Antiquity. Fall 2011. Robert Morrison.

Investigates astral religion and its relationship to astrological forecasting. Begins with a study of early astronomy, ancient Near Eastern omen texts, and the role of celestial bodies in ancient Near Eastern religion. Moves to classical expositions of astrology sach as the Tetrabiblos and critics of astrological forecasting such as Cicero. Concludes with the reception of astrology in Islamic civilization and the role of astral causation in Islamic thought.
Russian 22c. "It Happens Rarely, Maybe, but It Does Happen"-Fantasy and Satire in East Central Europe. Every other fall. Fall 2012. Raymond Miller.

Explores the fantastic in Russian and East European literature from the 1830s into the late twentieth century. Studies the origins of the East European fantastic in Slavic folklore and through the Romantic movement, and traces the historical development of the genre from country to country and era to era. Examines the use of the fantastic for the purpose of satire, philosophical inquiry, and social commentary, with particular emphasis on its critiques of nationalism, modernity, and totalitarianism. Authors include Nikolai Gogol', Mikhail Bulgakov, Karel Capek, Stanislaw Lem, and Franz Kafka.

Sociology 10b. Racism. Fall 2011. Spring 2012. Roy Partridge.
Examines issues of racism in the United States, with attention to the social psychology of racism, its history, its relationship to social structure, and its ethical and moral implications. (Same as Africana Studies 10.)
[Sociology 22b. In the Facebook Age.]

## Gay and Lesbian Studies

David Collings, Program Director<br>Glynis Wears-Siegel, Program Coordinator

Contributing Faculty: Susan Bellt, Aviva Briefel*, David A. Collings, Peter Coviello, Sarah O’Brien Conly, Guy Mark Foster, Celeste Goodridge, David Hecht, Aaron Kitch, Matthew Klingle†, Elizabeth Pritchard $\dagger$, Marilyn Reizbaum $\dagger$, Nancy Riley, Birgit Tautz $\dagger$, Jill S. Smith, Krista Van Vleet, William Watterson

The interdisciplinary Gay and Lesbian Studies Program coordinates courses that incorporate research on sexuality, particularly on gay, lesbian, bisexual, and transgender people. Drawing on a variety of approaches in several disciplines, such as queer theory and the history of sexuality, the program examines constructions of sexuality in institutions of knowledge, in aesthetic representation, and in modes of social practice, examining the question of sexual identity and performance across cultures and historical periods.

## Requirements for the Minor in Gay and Lesbian Studies

The minor consists of five courses: Gay and Lesbian Studies 201 and four other courses from the offerings listed below, some of which will change with every academic year. Among

## Courses of Instruction

the latter four courses, at least one must come from the social sciences and at least one from the arts and humanities division, 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.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
[16c. Sex and the Church. (Same as Gender and Women's Studies 17 and Religion 16.)]
[29c. Historians, Comediennes, Storytellers: Women Filmmakers in the GermanSpeaking Countries. (Same as Film Studies 29, Gender and Women's Studies 29, and German 29.)]

## Introductory, Intermediate, and Advanced Courses

111c - ESD. Introduction to LGBTQ Fiction. Spring 2012. Guy Mark Foster.
Using an intersectional reading approach, students closely analyze both classic and more contemporary lesbigay, trans, and queer fictional texts of the last one hundred years. Students consider the historically and culturally changing ways that sexuality has been understood within popular, medical, as well as religious discourses. And because gender conflict and the tendency to analogize the struggles of sexual and racial minorities are key features of this literary tradition, students are expected to engage this subject matter sensitively and critically. Possible texts include The Well of Loneliness, Giovanni's Room, Rubyfruit Jungle, A Single Man, Oranges Are Not the Only Fruit, and The Limits of Pleasure. (Same as English 111 and Gender and Women's Studies 111.)
201 - ESD. Gay and Lesbian Studies. Every year. Fall 2011. Guy Mark Foster.
An introduction to the materials, major themes, and defining methodologies of gay and lesbian studies. Considers in detail both the most visible contemporary dilemmas involving homosexuality (queer presence in pop culture, civil rights legislation, gay-bashing, AIDS, identity politics) as well as the great variety of interpretive approaches these dilemmas have, in recent years, summoned into being. Such approaches borrow from the scholarly practices of literary and artistic exegesis, history, political science, feminist theory, and psychoanalysis-to name only a few. An abiding concern over the semester is to discover how a discipline so variously influenced conceives of and maintains its own intellectual borders. Course materials include scholarly essays, journalism, films, novels, and a number of lectures by visiting faculty.
221b. Race and Sexuality in Modern America. Spring 2012. Tristan Cabello.
Surveys the history of race and sexuality as important intersecting categories that organize life and politics in the United States since the early twentieth century. Focuses on the development of racial and sexual classifications, and on the ways Americans embraced, resisted, and transformed the normative dimensions of those categories. Readings and discussions address the shifting relationship between social norms and marginal or deviant people and communities. Course materials include sociological, historical, and cultural analyses, media articles, visual texts, and fiction. Topics include the politics of respectability in communities of color, definitions of sexual freedom; marital norms; interracial marriage; sexual coercion; HIV/ AIDS; sex and race in American cinema; race and gay communities; and the sexual politics of social movements both left and right. (Same as Africana Studies 221 and Gender and Women's Studies 222.)

229c - ESD. Science, Sex, and Politics. Spring 2012. David Hecht.
Examines the intersection of science, sex, and politics in twentieth-century United States history. Issues of sex and sexuality have been contested terrain over the past hundred years, as varying conceptions of gender, morality, and "proper" sexual behavior have become politically and socially controversial. Explores the way that science has impacted these debates-often as a tool by which activists of varying political and intellectual persuasions have attempted to use notions of scientific objectivity and authority to advance their agendas. Explores debates over issues such as birth control, eugenics, abortion, and the "gay gene." (Same as Gender and Women's Studies 230 and History 229.)
231b - ESD, IP. A History of the Global AIDS Epidemic. Fall 2011. Tristan Cabello.
Seminar. An interdisciplinary exploration of the political, cultural, and social dimensions that characterize the experience of the HIV/AIDS crisis. Focusing on several geographic locations from the United States, to Haiti, to Europe, to South Africa, considers AIDS as a global pandemic. How did activists address political (in)action? How did cultural representations of AIDS evolve? How, and to what extent, have social constructions about AIDS changed over the last three decades? Course materials include sociological, historical, and cultural analyses, media articles, visual texts, and fiction. Topics include naming AIDS, the making of safe sex, "The Gay Disease," the San Francisco bathhouses, the AIDS business, AIDS in urban Black American communities, HAART (Anti-Retroviral Therapy), Activism and Politics, the Bateback Culture, ACT-UP, AIDS in Africa, Thatcher's AIDS politics, the generic HAART business in India, and the AIDS literary tradition. (Same as Africana Studies 231.)
236c. Romantic Sexualities. Fall 2011. David Collings.
Investigates constructions of sexuality in English romantic writing. Examines tales of seduction by supernatural or demonic figures; the sexualized world of the Gothic; the Byronic hero; lyrical depictions of incest; the yearning for an eroticized muse or goddess; and same-sex desire in travel writing, diaries, and realist fiction. Discusses the place of such writing in the history of sexual identities, repression, the unconscious, and the sublime. Authors may include Burke, Lewis, Mary Shelley, Byron, Wollstonecraft, Lister, Austen, Coleridge, Keats, and Percy Shelley, with further readings in queer theory and the history of sexuality. (Same as English 236 and Gender and Women's Studies 234.)
Prerequisite: One first-year seminar or 100-level course in English, gay and lesbian studies, or gender and women's studies.

241c. Victorian Race and Empire. Spring 2012. Aviva Briefel.
Examines Victorian constructions of racial difference and imperial relationships in literary texts ranging from the 1830 s to the fin de siècle. Of central concern will be issues of representation and racialized identity; fantasies about nationhood and colonialism; narratives of "adventure" at home and abroad; and images of gender and sexuality. Literary criticism central to discussions. Authors may include C. Brontë, Conrad, Doyle, Du Maurier, Haggard, Kipling, Marsh, and F. A. Steel. (Same as English 242 and Gender and Women's Studies 241.)
Prerequisite: One first-year seminar or 100 -level course in English.
[243c. Victorian Genders. (Same as English 243 and Gender and Women's Studies 239.)]
245c. Modernism/Modernity. Every other year. Fall 2013. Marilyn Reizbaum.
Examines the cruxes of the "modern," and the term's shift into a conceptual category rather than a temporal designation. Although not confined to a particular national or generic rubric,

Courses of Instruction
takes British works as a focus. Organized by movements or critical formations of the modern, i.e., modernisms, psychoanalysis, postmodernism, cultural critique. Readings of critical literature in conjunction with primary texts. Authors/directors/works may include T. S. Eliot, Joyce's Dubliners, Lawrence's Sons and Lovers, Sontag's On Pbotography, W. G. Sebald's The Natural History of Destruction, Ian McEwen's Enduring Love, Stevie Smith, Kureishi's My Son the Fanatic, and Coetzee's Disgrace. (Same as English 245 and Gender and Women's Studies 247.)

Prerequisite: One first-year seminar or 100 -level course in English, gay and lesbian studies, or gender and women's studies.
[253b - ESD. Constructions of the Body. (Same as Gender and Women's Studies 253 and Sociology 253.)]
[255c. Topics in Contemporary Literature Post 1945: Cold War Literature and Culture. (Same as English 255.)]
[266c - ESD. The City as American History. (Same as History 226.)]
275b. Gender and Sexuality in Contemporary Eastern Europe. Spring 2012. Kristen Ghodsee.

Seminar. Examines the current scholarship on gender and sexuality in modern Eastern Europe: the countries of the former Soviet Union, the successor states of Yugoslavia, Poland, Hungary, Romania, The Czech Republic, Slovakia, Bulgaria, and Albania. Focusing on research produced by academics based in the region, examines the dialogue and interchange of ideas between East and West, and how knowledge about the region is dialectically produced by both Western feminists and East European gender studies scholars. Topics include the women question before 1989; nationalism, fertility, and population decline; patterns and expectations for family formation; the politics of EU gender mainstreaming; visual representations in television and film; social movements; work; romance and intimacy; spirituality; and the status of academic gender studies in the region.
(Same as Gender and Women's Studies 275.)
Prerequisite: Gender and Women's Studies 101.
[276c - ESD. Queer Race. (Same as Africana Studies 276 and English 276.)]
291-294. Intermediate Independent Study in Gay and Lesbian Studies. The Program.
310c. Gay and Lesbian Cinema. Spring 2013. Tricia Welsch.
Considers both mainstream and independent films made by or about gays and lesbians. Four intensive special topics each semester, which may include classic Hollywood stereotypes and euphemisms; the power of the box office; coming of age and coming out; the social problem film; key figures; writing history through film; queer theory and queer aesthetics; revelation and revaluations of film over time; autobiography and documentary; the AIDS imperative. Writing intensive; attendance at evening film screenings is required. (Same as Film Studies 310 and Gender and Women's Studies 310.)

Prerequisite: One course in film studies or permission of the instructor.
[312b. Resistance and Accommodation: Comparative Perspectives on Gender. (Same as Gender and Women's Studies 312 and Sociology 312.)]

319c. James Baldwin. Spring 2012. Guy Mark Foster.
Examines the major postwar writings of the controversial African American author and the role his fiction and nonfiction played in challenging that era's static understandings of racial,
gender, and sexual politics. Although Baldwin lived abroad for much of his life, many critics associate the author narrowly with the U.S. black civil rights and sexual liberation struggles. In recent years, however, Baldwin has increasingly been recognized as a transnational figure and for his invaluable contributions to the discourse of globalization. Indeed, Baldwin's "geographical imagination," one informed by critical racial literacy, led him to anticipate many of the central insights of contemporary Queer Studies, Whiteness Studies, as well as Africana philosophical thought. (Same as Africana Studies 319 and English 319.)
Prerequisite: One 200-level course in English, Africana studies, or gay and lesbian studies; or permission of the instructor.
330c. Cultural Production during the Cold War. Fall 2011. Celeste Goodridge.
Considers the culture, values, and ideologies of postwar America. Through close analysis of literary texts and a consideration of the culture broadly, considers how these texts both reflect and sometimes subvert the dominant ideologies of cold war America. Authors include Truman Capote, Salinger, Plath, Patricia Highsmith, Baldwin, Tennessee Williams, and Mary McCarthy. Also considers representations of the period in Life magazine. (Same as English 330.)

Prerequisite: One 200-level course in English or permission of the instructor.
Note: This course fulfills the literature of the Americas requirement for English majors.
337c. Queer Child. Spring 2012. Peter Coviello.
Considers questions of desire, violence, and sexual identity in relation to a concept often understood to be defined by the absence of precisely those things: the child. We will ask: Is queer childhood only ever a notion assembled in retrospect? What kinds of relation obtain between queer adults and the children they were, and the children who come after them? What makes children queer? Readings may include James, McCullers, Woolf, Freud, Foucault, as well as the work of much contemporary queer scholarship. (Same as English 337.)

Prerequisite: One 200-level course in English or gay and lesbian studies, or permission of the instructor.

## Gender and Women’s Studies

Kristen Ghodsee, Program Director<br>Anne E. Clifford, Program Administrator

## Professor: Jennifer Scanlon

Associate Professor: Kristen R. Ghodsee
Visiting Faculty: Samaa Abdurraqib
Fellow: Desdamona Rios (Psychology)
Contributing Faculty: Susan Bell $\dagger$, Aviva Briefel*, Jorunn Buckley, Judith S. Casselberry, David A. Collings, Rachel Ex Connelly, Sara A. Dickey, Pamela M. Fletcher, Celeste Goodridge, David Hecht, Ann L. Kibbie, Jane Knox-Voina**, Raymond Miller, Elizabeth Pritchard $\dagger$, Marilyn Reizbaum $\dagger$, Nancy Riley, Rachel Sturman, Susan L. Tananbaum, Birgit Tautz $\dagger$, Shu-chin Tsui, Krista Van Vleet

The gender and women's studies curriculum is an interdisciplinary program that incorporates recent research on women and gender. Gender and women's studies combines the scholarly

## Courses of Instruction

traditions of each field in new and productive ways to develop a culture of critical thinking about sexuality, gender, race, and class. Courses in gender and women's studies 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 101, 201, and a 300 -level capstone seminar--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 gender and women's studies courses, or from a set of courses in other disciplines that have been approved by the Gender and Women's Studies Program Committee to count towards the major. Gender and women's studies courses are numbered to indicate the level of course instruction. The general level of instruction is indicated by the first number, so that courses below 30 are first-year seminars, 100-199 are general introductory courses, 200-290 are general intermediate-level courses, and 300 and higher 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 gender and women's studies. 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 gender and women's studies courses and served on the Gender 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 study (Gender and Women's Studies 401 and 402) are required for an honors project in gender and women's studies. No more than two independent study courses may count toward the gender and women's studies major.

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

The minor consists of Gender and Women's Studies 101 and 201, normally taken in the first or second year, and three additional courses. Students may count courses in their major, but may count only two courses from any single department outside of gender and women's studies. All courses must be taken on a graded basis (not Credit/D/Fail) and students must earn a grade of C - or better in order for a course to count toward the minor.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
11c. Sleeping with the Enemy: Representing Violence against Women. Fall 2011. Samaa Abdurraqib. (Same as English 11.)

14c. African American Writers and the Short Story. Fall 2011. Guy Mark Foster. (Same as Africana Studies 14 and English 12.)
[17c. Sex and the Church. (Same as Gay and Lesbian Studies 16 and Religion 16.)]
20c. In Sickness and in Health: Public Health in Europe and the United States. Spring 2013. Susan Tananbaum. (Same as History 20.)

22c. "Bad" Women Make Great History: Gender, Identity, and Society in Modern Europe, 1789-1945. Fall 2011. Page Herrlinger. (Same as History 22.)
[29c. Historians, Comediennes, Storytellers: Women Filmmakers in the GermanSpeaking Countries. (Same as Film Studies 29, Gay and Lesbian Studies 29, and German 29.)]

## Introductory, Intermediate, and Advanced Courses

101b - ESD. Introduction to Gender and Women's Studies. Fall 2011. Samaa Abdurraqib. Spring 2012. Samaa Abdurraqib and Desdamona Rios.
An interdisciplinary introduction to the issues, perspectives, and findings of the new scholarship that examines the role of gender in the construction of knowledge. Explores what happens when women become the subjects of study; what is learned about women; what is learned about gender; and how disciplinary knowledge itself is changed.
102c - ESD, VPA. Cultural Choreographies: An Introduction to Dance. Spring 2013. Paul Sarvis.

Dancing is a fundamental human activity, a mode of communication, and a basic force in social life. Investigates dance and movement in the studio and classroom as aesthetic and cultural phenomena. Explores how dance and movement activities reveal information about cultural norms and values and affect perspectives in our own and other societies. Using ethnographic methods, focuses on how dancing maintains and creates conceptions of one's own body, gender relationships, and personal and community identities. Experiments with dance and movement forms from different cultures and epochs-for example, the hula, New England contradance, classical Indian dance, Balkan kolos, ballet, contact improvisation, and African American dance forms from swing to hip-hop-through readings, performances, workshops in the studio, and field work. (Same as Dance 101.)

## 111c - ESD. Introduction to LGBTQ Fiction. Spring 2012. Guy Mark Foster.

Using an intersectional reading approach, students closely analyze both classic and more contemporary lesbigay, trans, and queer fictional texts of the last one hundred years. Students consider the historically and culturally changing ways that sexuality has been understood within popular, medical, as well as religious discourses. And because gender conflict and the tendency to analogize the struggles of sexual and racial minorities are key features of this literary tradition, students are expected to engage this subject matter sensitively and critically. Possible texts include The Well of Loneliness, Giovanni's Room, Rubyfruit Jungle, A Single Man, Oranges Are Not the Only Fruit, and The Limits of Pleasure. (Same as English 111 and Gay and Lesbian Studies 111.)
201b - ESD. Feminist Theory. Fall 2011. Jennifer Scanlon.
The history of women's studies and its transformation into gender studies and feminist theory has always included a tension between creating "woman," and political and theoretical challenges to that unity. Examines that tension in two dimensions: the development of critical perspectives on gender and power relations both within existing fields of knowledge, and within the continuous evolution of feminist discourse itself.

Prerequisite: Gender and Women's Studies 101 or permission of the instructor.

207c - ESD, VPA. Black Women, Politics, Music, and the Divine. Fall 2011. Judith Casselberry.

Seminar. Examines the convergence of politics and spirituality in the musical work of contemporary Black women singer-songwriters in the United States. Analyzes material that interrogates and articulates the intersections of gender, race, class, and sexuality, generated across a range of religious and spiritual terrains with African diasporic/Black Atlantic spiritual moorings, including Christianity, Islam, and Yoruba. Focuses on material that reveals a womanist (Black feminist) perspective by considering the ways resistant identities shape and are shaped by artistic production. Employs an interdisciplinary approach by incorporating ethnomusicology, anthropology, literature, history, and performance and social theory. Explores the work of Shirley Caesar, The Clark Sisters, Me'shell Ndegeocello, Abby Lincoln, Sweet Honey in the Rock, and Dianne Reeves, among others. (Same as Africana Studies 201, Music 201, and Religion 201.)

## 209c. Medieval Women's Writing. Spring 2012. Megan Cook.

Introduces students to writing by, for, and about women in late medieval England. Traces the way these texts reflect and shape the social, religious, and domestic lives of women living in the period. Focuses on texts composed by women such as The Book of Margery Kempe and The Showings of Julian of Norvich, but also includes works by men written for women's edification and entertainment and texts about women written by and for men. Readings may include manuals for religious women, lives of female saints, and books of instruction for young wives, as well as medical and scientific texts. Attention also given to the literary history of these works, and to contemporary critical approaches to issues of sexuality and gender in historical context. (Same as English 206.)

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
211c - ESD, IP. Muslim Women, Islam, and Feminism. Spring 2012. Samaa Abdurraqib.
Interrogates commonly held beliefs about how Islam regards Muslim women. A broad range of Muslim women, some who identify as feminist, others who do not, consider Islam crucial to their gendered identity. There are also feminist women who were born Muslim, some of whom continue to practice Islam, others who do not, who consider Islam as oppressing their gendered identity. Whatever their positions, it is crucial that these women discuss their relationships, as women, to Islam. In this current historical and cultural moment, critics and proponents of Islam often speak on behalf of Muslim women, while Muslim women remain silent. Readings include novels and poetry by Mohja Kahf, memoirs by Leila Ahmed and Fatima Mernissi, and a wide variety of other articles and texts written by Muslim women about their religious practices, their feminist practices, and how these practices affect their lives and perspectives. (Same as Religion 211.)

## 214b - ESD. Psychology of Women. Fall 2011. Desdamona Rios.

A survey of feminist theories and empirical findings on the psychology of women, as well as controversy related to and current approaches for studying women. Considers how the social construction of gender, the gendered nature of social institutions, and the way that gender intersects with race/ethnicity, sexual orientation, social class, and other social categories contribute to the psychology of women. (Same as Psychology 214.)

216b - ESD. Sociology of Gender. Fall 2011. Wendy Christensen.
Our ideas about gender-about women, men, masculinity, femininity-organize our social life in important ways that we often do not even notice. Critically examines the ways gender informs the social world in which we live and how beliefs about gender create and enforce a system of gender difference and inequality. Examines how gender is involved in and related to differences and inequalities in social roles, gender identity, sexual orientation, and social constructions of knowledge. Particular attention paid to exposing the gendered workings of institutions such as the family and the workplace, the link between gender and sexuality, and how race and class inform our ideas about gender. (Same as Sociology 219.)

Prerequisite: Sociology 101 or Anthropology 101, or permission of the instructor.
217c. Dostoevsky or Tolstoy. Every other spring. Spring 2012. Raymond Miller.
Explores and compares two giants of Russian literature, Lev Tolstoy and Fyodor Dostoevsky. Their works are read for their significance, both to Russian cultural history and to European thought; special attention is paid to the portrayal of women and women's issues by both authors. Part I studies Dostoevsky's quest for guiding principles of freedom and love in a world of growing violence, cynicism, and chaos. "The Woman Question" emerges as a constant subject: Dostoevsky particularly concerned himself with the suffering of poor and humiliated women. A close reading of several short works and the novel Brothers Karamazov set in their historical and intellectual framework. Emphasis on the novelist's struggle between Western materialistic individualism and Eastern voluntary self-renunciation. Examines Dostoevsky's "fantastic realism" as a polyphony of voices, archetypes, and religious symbols. Part II studies Tolstoy's development both as a novelist and a moral philosopher. Examines several works, the most important being the novel Anna Karenina, with special emphasis on the tension between Tolstoy-the-artist and Tolstoy-the-moralist. Discussion of the writer's role as "the conscience of Russia" in the last thirty years of his life, as well as his influence on such figures as Gandhi and Martin Luther King. (Same as Russian 224.)
218b - IP. Sex and Socialism: Gender and Political Ideologies of the Twentieth Century. Fall 2011. Kristen Ghodsee.

Focuses on gender issues in nations whose social, cultural, political, and economic histories have been shaped and/or influenced by Marxist-Leninism. Begins with a thorough examination of socialist ideas about the role of men and women in society and how these ideas evolved over time in the different countries and regions. The practical ramifications of these ideologies studied through a survey of policies, programs, and projects that were implemented by socialist governments around the world. Addresses how socialist ideologies of gender influenced everything from the rise of the second wave feminists in the United States to the political ascendance of the Taliban in Afghanistan. Considers the political and economic changes that have occurred after the collapse of the Soviet Union. Specifically deals with issues of race, class, religion, ethnicity, sexuality, and gerontocracy, as they directly relate to the (re) construction of identity taking place throughout the former and/or transitioning socialist countries.

## 220c - IP, VPA. Soviet Worker Bees, Revolution, and Red Love in Russian Film. Fall 2012. The Department.

Explores twentieth-century Russian society through critical analysis of film, art, architecture, music, and literature. Topics include scientific utopias, eternal revolution, individual freedom versus collectivism, conflict between the intelligentsia and the common man, the "new Soviet woman," nationalism, the thaw and double-think, stagnation of the 1970s, post-glastnost sexual

## Courses of Instruction

liberation, and black hole post-soviet film. Works of Eisenstein, Vertov, Pudovkin, Tarkovsky, Kandinsky, Chagall, Mayakovsky, Bulgakov, Pasternak, Brodsky, Akhmatova, Solzhenitsyn, Petrushevskaya, and Tolstaya. Weekly film viewings. Russian majors are required to do some reading in Russian. (Same as Russian 221.)

Note: May be counted towards a minor in film studies.
221c. Dostoevsky and the Novel. Spring 2013. Raymond Miller.
Examines Fyodor Dostoevsky's later novels. Studies the author's unique brand of realism ("fantastic realism," "realism of a higher order"), which explores the depths of human psychology and spirituality. Emphasis on the anti-Western, anti-materialist bias of Dostoevsky's quest for meaning in a world growing increasingly unstable, violent, and cynical. Special attention is given to the author's treatment of urban poverty and the place of women in Russian society. (Same as Russian 223.)

222b. Race and Sexuality in Modern America. Spring 2012. Tristan Cabello.
Surveys the history of race and sexuality as important intersecting categories that organize life and politics in the United States since the early twentieth century. Focuses on the development of racial and sexual classifications, and on the ways Americans embraced, resisted, and transformed the normative dimensions of those categories. Readings and discussions address the shifting relationship between social norms and marginal or deviant people and communities. Course materials include sociological, historical, and cultural analyses, media articles, visual texts, and fiction. Topics include the politics of respectability in communities of color; definitions of sexual freedom; marital norms; interracial marriage; sexual coercion; HIV/ AIDS; sex and race in American cinema; race and gay communities; and the sexual politics of social movements both left and right. (Same as Africana Studies 221 and Gay and Lesbian Studies 221.)
[223b - ESD. Cultural Interpretations of Medicine. (Same as Sociology 223.)]
[225c - ESD. Family Affairs: Changing Patterns in Europe. (Same as History 222.)]
[229b - ESD. Sociology of the Family. (Same as Sociology 229.)]
230c - ESD. Science, Sex, and Politics. Spring 2012. David Hecht.
Examines the intersection of science, sex, and politics in twentieth-century United States history. Issues of sex and sexuality have been contested terrain over the past hundred years, as varying conceptions of gender, morality, and "proper" sexual behavior have become politically and socially controversial. Explores the way that science has impacted these debates-often as a tool by which activists of varying political and intellectual persuasions have attempted to use notions of scientific objectivity and authority to advance their agendas. Explores debates over issues such as birth control, eugenics, abortion, and the "gay gene." (Same as Gay and Lesbian Studies 229 and History 229.)

234c. Romantic Sexualities. Fall 2011. David Collings.
Investigates constructions of sexuality in English romantic writing. Examines tales of seduction by supernatural or demonic figures; the sexualized world of the Gothic; the Byronic hero; lyrical depictions of incest; the yearning for an eroticized muse or goddess; and same-sex desire in travel writing, diaries, and realist fiction. Discusses the place of such writing in the history of sexual identities, repression, the unconscious, and the sublime. Authors may include Burke, Lewis, Mary Shelley, Byron, Wollstonecraft, Lister, Austen, Coleridge, Keats, and Percy

Shelley, with further readings in queer theory and the history of sexuality. (Same as English 236 and Gay and Lesbian Studies 236.)

Prerequisite: One first-year seminar or 100 -level course in English, gay and lesbian studies, or gender and women's studies.
[235c - ESD. Lawn Boy Meets Valley Girl: Gender and the Suburbs. (Same as History 234.)]
[237b - ESD, IP. Family, Gender, and Sexuality in Latin America. (Same as Anthropology 237 and Latin American Studies 237.)]
[239c. Victorian Genders. (Same as English 243 and Gay and Lesbian Studies 243.)]
241c. Victorian Race and Empire. Spring 2012. Aviva Briefel.
Examines Victorian constructions of racial difference and imperial relationships in literary texts ranging from the 1830 s to the fin de siècle. Of central concern will be issues of representation and racialized identity; fantasies about nationhood and colonialism; narratives of "adventure" at home and abroad; and images of gender and sexuality. Literary criticism central to discussions. Authors may include C. Brontë, Conrad, Doyle, Du Maurier, Haggard, Kipling, Marsh, and F. A. Steel. (Same as English 242 and Gay and Lesbian Studies 241.)
Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.

## 243c - IP, VPA. Russia's "Others": North Caucasus, Siberia, and Central Asia through

 Film and Literature. Spring 2013. The Department.Films, music, short stories, folklore, and art are analyzed for the construction of national identity of Asian peoples from the Caucasus to the Siberian Bering Straits-Russia and the Former Central Asia (the "stans" and Mongolia). Themes: Multicultural conflicts along the Silk Road, the transit zone linking West to East. Changing roles of Asian women as cornerstone for nations. Survival and role of indigenous peoples in solving cultural, economic, and geopolitical issues facing the twenty-first century. Arrival of "outsiders": from early traders to Siberian settlers to exiled convicts; from early conquerors to despotic Bolshevik rulers, from Genghis Khan to Stalin. Impact of Soviet collectivization, industrialization, and modernism on traditional beliefs, the environment, subsistence indigenous cultures, and Eastern spiritualities (Islam, shamanism). Questions how film and literature both tell and shape the story of "nations." Films include S. Bodrov's Prisoner of the Mountains (Caucasus) and Mongol; V. Pudovskin's Storm Over Asia, A. Kurosawa's Dersu Uzala, N. Mikhalkov's Close to Eden, A. Konchalovsky's Siberiade, G. Omarova's Scbǐo. (Same as Russian 251.)

Note: May be counted towards a minor in film studies.
247c. Modernism/Modernity. Every other year. Fall 2013. Marilyn Reizbaum.
Examines the cruxes of the "modern," and the term's shift into a conceptual category rather than a temporal designation. Although not confined to a particular national or generic rubric, takes British works as a focus. Organized by movements or critical formations of the modern, i.e., modernisms, psychoanalysis, postmodernism, cultural critique. Readings of critical literature in conjunction with primary texts. Authors/directors/works may include T. S. Eliot, Joyce's Dubliners, Lawrence's Sons and Lovers, Sontag's On Photography, W. G. Sebald's The Natural

History of Destruction, Ian McEwen's Enduring Love, Stevie Smith, Kureishi's My Son the Fanatic, and Coetzee's Disgrace. (Same as English 245 and Gay and Lesbian Studies 245.)

Prerequisite: One first-year seminar or 100-level course in English, gay and lesbian studies, or gender and women's studies.

## 248c - ESD. Family and Community in American History, 1600-1900. Fall 2012. Sarah McMahon.

Examines the social, economic, and cultural history of American families from 1600 to 1900, and the changing relationship between families and their kinship networks, communities, and the larger society. Topics include gender relationships; racial, ethnic, cultural, and class variations in family and community ideals, structures, and functions; the purpose and expectations of marriage; philosophies of child-rearing; organization of work and leisure time; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life and community organization. (Same as History 248.)
249c. History of Women's Voices in America. Spring 2013. Sarah McMahon.
Seminar. Examines women's voices in America from 1650 to the twentieth century, as these emerged in private letters, journals, and autobiographies; poetry, short stories, and novels; essays, addresses, and prescriptive literature. Readings from the secondary literature provide a historical framework for examining women's writings. Research projects focus on the form and content of women's literature and the ways that it illuminates women's understandings, reactions, and responses to their historical situation. (Same as History 249.)

Prerequisite: One course in history.
251c - ESD. Women in American History, 1600-1900. Spring 2014. Sarah McMahon.
A social history of American women from the colonial period through the nineteenth century. Examines women's changing roles in both public and private spheres; the circumstances of women's lives as these were shaped by class, ethnic, and racial differences; the recurring conflict between the ideals of womanhood and the realities of women's experience; and focuses on family responsibilities, paid and unpaid work, religion, education, reform, women's rights, and feminism. (Same as History 246.)

## 252c. Empire of Feeling. Spring 2012. Peter Coviello.

A study of the relations between sentiment and belonging across the American nineteenth century. Considers how a language of impassioned feeling promised to consolidate a nation often bitterly divided, and some of the problems with that promise. Centers on a reading of Harriet Beecher Stowe's Uncle Tom's Cabin. Other authors may include Jefferson, Wheatley, Melville, Hawthorne, Wilson, and Du Bois. (Same as Africana Studies 252 and English 252.)
Prerequisite: One first-year seminar or 100-level course in English, Africana studies, or gender and women's studies.
[253b - ESD. Constructions of the Body. (Same as Gay and Lesbian Studies 253 and Sociology 253.)]
[254b - ESD, IP. Gender and Sexuality in Latin America. (Same as Anthropology 254, Latin American Studies 257, and Sociology 254.)]
[255b - ESD. Gender and Politics. (Same as Sociology 255.)]
[256c - ESD. Gender, Body, and Religion. (Same as Religion 253.)]

258c - ESD. Labor, Gender, and Immigration in the United States-Mexico Borderlands. Spring 2012. Lori Flores.

Seminar. Explores the history of the United States-Mexico borderlands through the prisms of work, gender, and movements of people. What is the definition of a "borderland" and who or what creates one, physical or imagined? What historical moments and patterns make the United States-Mexico borderlands a unique space, and how has this space shifted and changed over time? Through readings students will analyze how labor and class, articulations and notions of gender, and immigraion policies and migrant flows have impacted processes of identity formation, inclusion, and exclusion for this region's racially and ethnically diverse communities. A critical understanding of place, relations of power, historical memory, and the meanings of transnationalism are major objectives. (Same as History 260 and Latin American Studies 260.)
[259c - ESD, IP. Sex and the Politics of the Body in India. (Same as Asian Studies 237 and History 259.)]
[260c. African American Fiction: (Re)Writing Black Masculinities. (Same as Africana Studies 260 and English 260.)]
[261c - ESD. Gender, Film, and Consumer Culture. (Same as Film Studies 261.)]
266c - IP. Chinese Women in Fiction and Film. Spring 2013. Shu-chin Tsui.
Approaches the subject of women and writing in twentieth- and early twenty-first-century China from perspectives of gender studies, literary analysis, and visual representations. Considers women writers, filmmakers, and their works in the context of China's socialpolitical history as well as its literary and visual traditions. Focuses on how women writers and directors negotiate gender identity against social-cultural norms. Also constructs a dialogue between Chinese women's works and Western feminist assumptions. (Same as Asian Studies 266.)

270c - ESD. Spirit Come Down: Black Women and Religion. Spring 2012. Judith Casselberry.
Explores issues of self-representation, memory, material culture, embodiment, and civic and political engagement through autobiographical, historical, literary, anthropological, cinematic, and musical texts. Primarily focused on Christian denominations: Methodist, Baptist, and Pentecostal. Examines the religious lives of black women in nineteenth- and twentieth-century America. (Same as Africana Studies 271 and Religion 271.)

## 275b. Gender and Sexuality in Contemporary Eastern Europe. Spring 2012. Kristen Ghodsee.

Seminar. Examines the current scholarship on gender and sexuality in modern Eastern Europe: the countries of the former Soviet Union, the successor states of Yugoslavia, Poland, Hungary, Romania, The Czech Republic, Slovakia, Bulgaria, and Albania. Focusing on research produced by academics based in the region, examines the dialogue and interchange of ideas between East and West, and how knowledge about the region is dialectically produced by both Western feminists and East European gender studies scholars. Topics include the women question before 1989; nationalism, fertility, and population decline; patterns and expectations for family formation; the politics of EU gender mainstreaming; visual representations in television and film; social movements; work;
romance and intimacy; spirituality; and the status of academic gender studies in the region. (Same as Gay and Lesbian Studies 275.)

## Prerequisite: Gender and Women's Studies 101.

[277-MCSR. Applied Research Practicum: Chinese Rural to Urban Migration. (Same as Asian Studies 269 and Economics 277.)]

280c. Forty Years: The History of Women at Bowdoin. Fall 2011. Jennifer Scanlon.
Seminar. The 2011-2012 academic year marks the fortieth anniversary of the matriculation of the first full class of women students at Bowdoin. Explores through archival work and oral history interviews this history as well as the larger social and cultural changes that ushered in coeducation at Bowdoin and elsewhere in this era. Topics include the history of higher education and feminism as well as critical debates and objectives in oral and archival research, including designing a research project; oral history as empowerment; interpreting memory; and the relationship between research and advocacy.

Prerequisite: Gender and Women's Studies 101 or permission of the instructor.

## 289c - IP. Construction of the Goddess and Deification of Women in Hindu Religious

 Tradition. Fall 2011. Sree Padma Holt.Focuses include (1) an examination of the manner in which the power of the feminine has been expressed mythologically and theologically in Hinduism; (2) how various categories of goddesses can be seen or not as the forms of the "great goddess"; and (3) how Hindu women have been deified, a process that implicates the relationship between the goddess and women. Students read a range of works, primary sources, biographies and myths of deified women, and recent scholarship on goddesses and deified women. (Same as Asian Studies 289 and Religion 289.)
291-294. Intermediate Independent Study in Gender and Women's Studies. The Program.

301b. Doing Gender Studies: Ethnographies of Gender. Spring 2012. Kristen R. Ghodsee.
Explores how research and scholarship on gender can be an engine for social change. Students learn how to use the different "tools" of the scholar: interviews, surveys, oral history, archival research, participant observation, and discourse analysis. Through a semester-long research project, each student has a hands-on experience of designing and implementing an in-depth study on the gender issue of the student's choice. Open to gender and women's studies majors and minors, or with permission of the instructor.
[302b. The Economics of the Family. (Same as Economics 301.)]
[304b. Introduction to Qualitative Research Methods. (Same as Psychology 278.)]
310c. Gay and Lesbian Cinema. Spring 2013. Tricia Welsch.
Considers both mainstream and independent films made by or about gays and lesbians. Four intensive special topics each semester, which may include classic Hollywood stereotypes and euphemisms; the power of the box office; coming of age and coming out; the social problem film; key figures; writing history through film; queer theory and queer aesthetics; revelation and revaluations of film over time; autobiography and documentary; the AIDS imperative. Writing intensive; attendance at evening film screenings is required. (Same as Film Studies 310 and Gay and Lesbian Studies 310.)

Prerequisite: One course in film studies or permission of the instructor.
[312b. Resistance and Accommodation: Comparative Perspectives on Gender. (Same as Gay and Lesbian Studies 312 and Sociology 312.)]

322c. Race, Gender, and Ethnicity in British and European Society. Spring 2012. Susan Tananbaum.

An analysis of cultural traditions in Britain and Europe. Explores the impact of immigration on Britain and the Continent, notions of cultural pluralism, and the changing definitions and implications of gender in Britain and Europe from the late eighteenth century to the present. Students undertake a major research project utilizing primary sources. (Same as History 322.)

401-404. Advanced Independent Study and Honors in Gender and Women's Studies. The Program.

If taken during the Fall 2011 semester or before, the following related courses may be used to satisfy requirements for the major or minor in gender and women's studies. For full course descriptions and prerequisites, see the appropriate department listings.
Africana Studies
10b. Racism. Fall 2011. Roy Partridge. (Same as Sociology 10.)
Sociology
10b. Racism. Fall 2011. Roy Partridge. (Same as Africana Studies 10.)

## German

Steven R. Cerf, Department Cbair
Tammis L. Donovan, Department Coordinator
Professor: Steven R. Cerf
Associate Professor: Birgit Tautz $\dagger$
Assistant Professor: Jill S. Smith
Visiting Faculty: Andrew E. Erwin
Teaching Fellow: Neslihan Bulut

The German department offers courses in the language, literature, and culture of the Germanspeaking 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 international careers, and law and graduate school.

## Requirements for the Major in German

The major consists of eight courses, one of which is German 204 or the equivalent. One course may be chosen from 151-156 and the others from 205-402. 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 one of a number of study-abroad programs with different calendars and formats.

## Requirements for the Minor in German

The minot consists of German 102 or the equivalent, plus any four courses, of which two must be in the language (203-398).

Courses that will count toward the major or minor must be taken on a graded basis (not Credit/D/Fail).

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
[29c. Historians, Comediennes, Storytellers: Women Filmmakers in the GermanSpeaking Countries. (Same as Film Studies 29, Gay and Lesbian Studies 29, and Gender and Women's Studies 29.)]

## German Literature and Culture in English Translation

151c - ESD. The Literary Imagination and the Holocaust. Fall 2011. Steven Cerf.
An examination of the literary treatment of the Holocaust, a period between 1933 and 1945, during which eleven million innocent people were systematically murdered by the Nazis. Four different literary genres are examined: the diary and memoir, drama, poetry, and the novel. Three basic sets of questions are raised by the course: How could such slaughter take place in the twentieth century? To what extent is literature capable of evoking this period and what different aspects of the Holocaust are stressed by the different genres? What can our study of the Holocaust teach us with regard to contemporary issues surrounding totalitarianism and racism? No knowledge of German is required.
152c - IP, VPA. Berlin: Sin City, Divided City, City of the Future. Spring 2012. Jill Smith.
An examination of literary, artistic, and cinematic representations of the city of Berlin during three distinct time periods: the "Roaring 20s," the Cold War, and the post-Wall period. Explores the dramatic cultural, political, and physical transformations that Berlin underwent during the twentieth century and thereby illustrates the central role that Berlin played, and continues to play, in European history and culture, as well as in the American cultural imagination. For each time period studied, compares Anglo-American representations of Berlin with those produced by German artists and writers, and investigates how, why, and to what extent Berlin has retained its status as one of the most quintessentially modern cities in the world. No knowledge of German is required.
[156c - ESD, VPA. Nazi Cinema: Propaganda or Entertainment?]
[158c - IP, VPA. Art and Politics: Introduction to Materialist Aesthetics.]

## Language and Culture Courses

## 101c. Elementary German I. Every fall. Fall 2011. Steven Cerf.

German 101 is the first course in German language and culture and is open to all students without prerequisite. Facilitates an understanding of culture through language. Introduces German history and cultural topics. Three hours per week. Acquisition of four skills: speaking and understanding, reading, and writing. One hour of conversation and practice with teaching assistant. Integrated language laboratory work.

102c. Elementary German II. Every spring. Spring 2012. Andrew Erwin.
Continuation of German 101. Equivalent of German 101 is required.
203c. Intermediate German I: Germany within Europe. Every fall. Fall 2011. Andrew Erwin.

Continued emphasis on the understanding of German culture through language. Focus on social and cultural topics through history, literature, politics, popular culture, and the arts. Three hours per week of reading, speaking, and writing. One hour of discussion and practice with teaching assistant. Language laboratory also available. Equivalent of German 102 is required.

204c. Intermediate German II: German History through Visual Culture. Every spring. Spring 2012. Jill Smith.
Continuation of German 203. Equivalent of German 203 is required.
205c - IP. Advanced German Texts and Contexts. Every year. Fall 2011. Jill Smith.
Designed to explore aspects of German culture in depth, to deepen the understanding of culture through language, and to increase facility in speaking, writing, reading, and comprehension. Topics include post-war and/or post-unification themes in historical and cross-cultural contexts. Particular emphasis on post-1990 German youth culture and language. Includes fiction writing, film, music, and various news media. Weekly individual sessions with the Teaching Fellow from the Johannes-Gutenberg-Universität-Mainz. Equivalent of German 204 is required.
291c-294c. Intermediate Independent Study in German. The Department.

## Literature and Culture Courses

All courses require the equivalent of German 204.
308c - IP. Introduction to German Literature and Culture. Every year. Spring 2012. Steven Cerf.

Designed to be an introduction to the critical reading of texts by genre (e.g., prose fiction and nonfiction, lyric poetry, drama, opera, film) in the context of German intellectual, political, and social history. Focuses on various themes and periods. Develops students' sensitivity to generic structures and introduces terminology for describing and analyzing texts in historical and crosscultural contexts. Weekly individual sessions with the Teaching Fellow from the Johannes-Gutenberg-Universität-Mainz.

313c - IP. German Classicism: Love and Passion. Fall 2011. Andrew Erwin.
Focus on the mid to late eighteenth century as an age of contradictory impulses (e.g., the youthful revolt of Storm and Stress against the Age of Reason). Examines manifestations of such impulses-the emerging passions of new social classes, new expressions of selfhood, and the upheavals brought about by violent political revolutions-in the works of major (e.g., Goethe, Schiller) and less well-known (e.g., Stein) authors. Beginning with Kant's belated but canonical formulation, steps back and follows the trajectories of love and passion through drama, poetry, fiction, and essays of the mid- to late-eighteenth century. Along the way, asks how enlightenment played itself out, not only within the orderly confines of intellectual discourse, but in the rough and tumble spaces where lovers, fathers, sons and daughters, bourgeois and aristocrats, collided in the eighteenth century. Investigation of texts in their broader cultural context with appropriate theory and illustrated through film and drama on video, statistical data, developments in eighteenth-century dance, music, and legal discourse.

## Courses of Instruction

## 314c - IP. German Romanticism. Spring 2012. Steven Cerf.

Examines the origins of the German Romantic movement in the first half of the nineteenth century and its impact on German culture (e.g., music and the other arts, philosophy, politics, popular culture, continued legacy of Romanticism in subsequent periods of German culture and literature). Focus on representative authors, genres, and themes such as Romantic creativity, genius, horror, and fantasy.

## 315c - IP. Realism and Revolution in Nineteenth-Century German Literature and

 Culture. Fall 2012. The Department.What is revolution? What forms has it taken within German-speaking society and culture? Examines a variety of literary, cultural, and social texts from 1830 to 1900 in their broader cultural, artistic, philosophical, and political contexts. Beyond discussing the effects (both positive and negative) of the Industrial Revolution, discusses three other forms of revolution that emerge in nineteenth-century German discourse: (1) political revolution (the formation of German national identity; the rise of the socialist movement); (2) artistic revolution (the search for an artistic direction at the end of the Age of Goethe; the tensions between social realism and romanticism); (3) sexual revolution (scientific interest in "normal" vs. "abnormal" sexual behavior; the advent of the women's movement and the questioning of gender roles). Authors/artists may include Heine, Büchner, Hebbel, Hauptmann, Andreas-Salomé, Fontane, Wagner, Marx and Engels, Bebel, Simmel, Kollwitz, Krafft-Ebing.

## 316c - IP. Modernism: Modernist Visions. Spring 2013. The Department.

Discusses the extent to which modernism, its narratives, philosophy, and arts are tied to the heightened importance of vision and visual technologies around 1900, and examines modernist legacies beyond the confines of the Weimar Republic and the Nazi regime. Special attention is given to depictions of space (e.g., cities, "exotic lands," the rural landscape, travel), depiction of protagonists' interior worlds, so-called new objectivity, and the interrelation of visual arts and narrative, the development of particular visual technologies (e.g., photography, film, commercial galleries, museums, display culture), and avant-garde movements (e.g., Dada). Texts and films by the following authors, artists, filmmakers, and philosophers are read and analyzed in their historical, social, and literary contexts: Kafka, Rilke, Brecht, Benjamin, ModersohnBecker, Simmel, Freud, Ruttmann, Murnau, Seghers, and Sebald. Combines discussion, analytical and interpretive papers, film showings, and resources of the art museum.

## 317c - IP. German Literature and Culture since 1945. Fall 2011. Jill Smith.

An exploration of how successive generations have expressed their relationship to the catastrophe of the Nazi past. Examines representative texts of East and West German writers/ filmmakers in Cold War and post-unification contexts. A discussion of German identity from several critical perspectives, including Vergangenbeitsbewältigung, the political and cultural influence of the United States and the Soviet Union, gender in the two Germanys, and the politics of migration and citizenship. Authors may include Grass, Böll, Borchert, Brussig, Özdamar, Schlink, and Wolf. Films by Fassbinder, von Trotta, Schlöndorff, Akin, and Levy.
[321c - IP. Before and After the Wall: East German Traditions in Literature, Culture, and Film.]

390-399. Seminar in Aspects of German Literature and Culture.
Work in a specific area of German culture not covered in other departmental courses, e.g., individual authors, movements, genres, cultural influences, and historical periods.

391c - IP. Mysticism and Modernist Ethics. Spring 2012. Andrew Erwin.
Artists and intellectuals in early twentieth-century Europe displayed a preoccupation with what they imagined as a distinct experiential realm of ethics. For these individuals, ethics was associated above all with mystical experiences or mystical consciousness. In developing their sense for this realm, some looked to their own experiences and found limitations in normal modes of thought. Others sought insight through reading and translating ancient and medieval mystical texts from both European and non-European cultures. Still others imagined the practice of various art forms as enabling access to the mystical. But whether arrived at experientially, mediated through texts, or explored in artistic practice, early twentieth-century mysticism intersected with many of the most important ethical issues of the day from the events of the First World War and the rise of totalitarian politics to the implications and limits of scientific knowledge. Examines different manifestations (in literature, philosophy, painting, music, architecture, and film) of the early twentieth-century preoccupation with mysticism, asking what and how individual, social, historical, and political forces shaped the mystical contours of modernist ethics.

## 395c - IP. Myths, Modernity, Media. Fall 2012. Birgit Tautz.

Explores the important role that myths have played in German cultural history. While founding myths of Germanic culture (e.g., Nibelungen) are considered, focuses especially on myth in relation to fairy tales, legends (including urban legends of the twentieth century), and borderline genres and motifs (e.g., vampires, witches, automatons), as well as on questions of mythmaking. Examines why modern culture of the twentieth and twenty-first centuries, which seemingly neglects or overcomes myths, heavily engages in mythicization of ideas (e.g., gender roles, the unnatural) and popularizes myths through modern media (film, television, the Internet), locations (e.g., cities) and transnational exchange (Disney; the myth of "the Orient"). Aside from short analytical or interpretive papers aimed at developing critical language skills, students may pursue a creative project (performance of a mythical character, design of a scholarly Web page, writing of a modern fairy tale).
396c - IP. Vienna, 1890-1914. Spring 2013. Steven Cerf.
An examination of representative shorter literary works (i.e., Novellen, dramas, poetry, essays, etc.) of such diverse, psychologically oriented authors as Schnitzler, Freud, Hofmannsthal, Trakl, Kraus, and Musil in historical and cultural contexts. Three basic areas explored: (1) how and why turn-of-the-century Vienna became the home of modern psychiatry; (2) the myriad ways in which imaginative writers creatively interacted with leading composers, visual artists, and philosophers of the era; (3) the extent to which such cinematic directors as Ophüls, Reed, and Schlöndorff were able to capture Viennese intellectual and creative vibrancy for the screen.
397c - IP. Global Germany? Spring 2013. Jill Smith.
The fall of the Berlin Wall and the concomitant end of the Cold War ushered in what many cultural critics call "the era of globalization." An exploration of how contemporary German culture (1990-present) grapples with both the possibilities and uncertainties presented by globalization. Examines a myriad of cultural texts-films, audio plays, dramas, short fiction, novels, photographs, websites-as well as mass events (i.e., the Love Parade, the 2006 World Cup) within their political, social, and economic contexts to show how Germany's troubled past continues to affect the role it plays on the global stage and how its changing demographics-increased urbanization and ethnic diversity-have altered its cultural and literary landscape. Critically considers issues such as migration, terrorism and genocide, sex tourism, the formation of the European Union and the supposed decline of the nation-state.

Frequent short writings, participation in debates, and a final research project based upon a relevant topic of individual interest are required.
[398c - IP. Colors: Signs of Ethnic Difference 1800/1900/2000.]
401c-404c. Advanced Independent Study and Honors in German. The Department.

## Government and Legal Studies

Allen L. Springer, Department Chair<br>Lynne P. Atkinson, Department Coordinator

Professors: Paul N. Franco, Janet M. Martin, Richard E. Morgan, Christian P. Potholm, Allen L. Springer, Jean M. Yarbrough
Associate Professors: Henry C. W. Laurence (Asian Studies), Michael M. Franz, Laura A. Henry†
Assistant Professors: Ericka A. Albaugh $\dagger$, Shelley M. Deane, Christopher Heurlin (Asian Studies), Jeffrey S. Selinger
Visiting Faculty: Seth N. Jaffe, Nicholas H. Toloudis
Lecturers: Brian Duff (Coastal Studies), George S. Isaacson, DeWitt John** (Environmental Studies)

## Requirements for the Major in Government and Legal Studies

Courses within the department are divided into four fields:
American government: Government 11, 21, 25, 150, 201, 202, 203, 204, 205, 206, 208, 209, 210, 211, 216, 255, 303, 304, 308, and 309.
Comparative politics: Government 18, 19 (same as Asian Studies 19), 20 (same as Asian Studies 20), 23, 120, 220, 221, 222 (same as Africana Studies 222), 224, 225, 226, 227 (same as Asian Studies 227), 228 (same as Asian Studies 228), 229 (same as Asian Studies 229), 230, 232 (same as Asian Studies 282), 233, 236, 237, 238, 239, 261, 268, 272 (same as Asian Studies 265), 273, 274, 275, 283, 321, 324, 325, 327, 330, 332 (same as Asian Studies 332), 333 (same as Asian Studies 333), and 337 (same as Asian Studies 337).
Political theory: Government 12, 26, 28, 240, 241, 243, 244, 245, 246, 249, 250, 341, 342, 346.
International relations: Government 10, 11, 18, 20 (same as Asian Studies 20), 23, 160, 220, 222 (same as Africana Studies 222), 225, 226, 228 (same as Asian Studies 228), 229 (same as Asian Studies 229), 233, 236, 237, 238, 260, 261, 263 (same as Environmental Studies 263), 265, 268, 270, 272 (same as Asian Studies 265), 273, 274, 275, 321, 324, 325, 327, 330, 337 (same as Asian Studies 337), 361, and 363 (same as Environmental Studies 363).
Every major is expected to complete an area of concentration in one of these fields.
The major consists of nine courses, no more than two taken at Level A, and no more than one first-year seminar, and distributed as follows:

1. A field of concentration, selected from the above list, 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 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.


#### Abstract

3. Government 207 (same as Environmental Studies 207), 214 (same as Environmental Studies 202), 219 (same as Education 250), 264 (same as Environmental Studies 264), 284, 393 (same as Asian Studies 344 and Religion 344), 395 (same as Environmental Studies 395), Environmental Studies 240, while not fulfilling the requirement for any of the four fields of concentration, can be counted toward the total number of courses required for the major or minor. 4. 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. 5. To fulfill the major/minor requirements, a grade of C - or better must be earned in a course.

Courses used to fulfill major/minor requirements must be taken on a graded basis (not Credit/D/Fail).


## 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 fields. No more than two Level A courses and no more than one first-year seminar may count toward the minor.

## Level A Courses

## Introductory Seminars

All introductory seminars are designed to provide an introduction to a particular aspect of government and legal studies. Students are encouraged to analyze and discuss important political concepts and issues, while developing research and writing skills.

Enrollment is limited to sixteen students in each seminar. First-year students are given first priority; sophomores are given second priority. For a description of the following introductory seminars, see First-Year Seminars, pages 141-51.

10b. The Pursuit of Peace. Fall 2011. Allen L. Springer.
11b. The Korean War. Fall 2011. Christian P. Potholm.
[18b. NGOs in Politics.]
19b. East Asian Politics: Introductory Seminar. Fall 2011. Henry C. W. Laurence. (Same as Asian Studies 19.)

21b. Citizenship and Representation in American Politics. Fall 2011. Michael M. Franz.
25b. American Politics: Representation, Participation, and Power. Fall 2011. Janet M. Martin.

26b. Fundamental Questions: Exercises in Political Theory. Fall 2011. Jean M. Yarbrough.
28b. Human Being and Citizen. Fall 2011. Paul N. Franco.

## Courses of Instruction

## Introductory Lectures

These courses are intended for first-year students and sophomores. Others may take them only with the permission of the instructor.
120b. Introduction to Comparative Government. Spring 2012. Christopher Heurlin.
Provides a broad introduction to key concepts in comparative politics. Most generally, asks why states are governed differently, both historically and in contemporary politics. Begins by examining foundational texts, including works by Marx, Smith, and Weber. Surveys subfields within comparative politics (the state, regime types, nations and nationalism, party systems, development, and civil society) to familiarize students with major debates and questions.
150b. Introduction to American Government. Fall 2011. Michael M. Franz.
Provides a comprehensive overview of the American political process. Specifically, traces the foundations of American government (the Constitution, federalism, civil rights, and civil liberties), its political institutions (Congress, Presidency, courts, and bureaucracy), and its electoral processes (elections, voting, and political parties). Also examines other influences, such as public opinion and the mass media, which fall outside the traditional institutional boundaries, but have an increasingly large effect on political outcomes.

160b. Introduction to International Relations. Fall 2011 and Spring 2012. Seth N. Jaffe.
Provides a broad introduction to the study of international relations. Designed to strike a balance between empirical and historical knowledge and the obligatory theoretical understanding and schools of thought in IR. Designed as an introductory course to familiarize students with no prior background in the subject, and recommended for first- and second-year students intending to take upper-level international relations courses.

## Level B Courses

Level B courses are designed to introduce students to or extend their knowledge of a particular aspect of government and legal studies. The courses range from the more introductory to the more advanced. Students should consult the individual course descriptions regarding any prerequisites.
201b. Law and Society. Spring 2012. Richard E. Morgan.
An examination of the American criminal justice system. Although primary focus is on the constitutional requirements bearing on criminal justice, attention is paid to conflicting strategies on crime control, to police and prison reform, and to the philosophical underpinnings of the criminal law.

202b. The American Presidency. Spring 2012. Janet M. Martin.
An examination of the presidency in the American political system, including the "road to the White House" (party nomination process and role of the electoral college), advisory systems, the institutional presidency, relations with Congress and the courts, and decision-making in the White House. Drawing upon the instructor's own research and a growing body of literature in this area, the role of women as advisors within the White House and executive branch, and influence of outside groups on the White House's consideration of "women's issues," especially since 1960 , are also discussed.

203b. Political Parties in the United States. Spring 2012. Jeffrey S. Selinger.
Throughout American political history, parties have been among the most adept institutions at organizing political conflict and, more generally, American political life. In this vein, the role of political parties in the evolution of American politics is discussed. Special attention is given to the present political context, which many characterize as an era of ideologically polarized parties. Explores and challenges this conventional wisdom.

204b. Congress and the Policy Process. Fall 2011. Janet M. Martin.
An examination of the United States Congress, with a focus on members, leaders, constituent relations, the congressional role in the policy-making process, congressional procedures and their impact on policy outcomes, the budget process, and executive-congressional relations.

## [205b. Campaigns and Elections.]

206b. Public Policy in the United States. Fall 2011. Jeffrey S. Selinger.
How is public policy in the United States shaped by the political process? How does public policy and state-building define the contours of American politics? Examines the qualitative differences between redistributive, regulatory, and "patronage" policy, and evaluates the impact of public policy on American political development. Readings explore in some detail a number of key policy areas including health care, immigration reform, and homeland security.

207b. Building Healthy Communities. Spring 2013. DeWitt John.
Examines efforts by communities and regions to build strong local economies, safeguard important environmental values, protect public health, and address issues of economic and social justice. In many communities, metropolitan areas, and rural regions, state and local government officials work with other leaders to set ambitious goals for economic and environmental sustainability and to develop specific plans for sustainable development. These efforts cross political, institutional, and sectoral barriers, thus challenging and sometimes reshaping state and local politics as well as American federalism. Examines how local leaders can work in complex settings to set goals and mobilize federal, private, and nonprofit resources to achieve specific, cross-cutting objectives. (Same as Environmental Studies 207.)

Prerequisite: One course in environmental studies or government.
[209b. Introduction to Political Behavior.]
210b. Constitutional Law I. Every fall. Fall 2011. Richard E. Morgan.
Examines the development of American constitutionalism, the power of judicial review, federalism, and separation of powers.
211b. Constitutional Law II: Civil Rights and Liberties. Every spring. Spring 2012. Richard E. Morgan.

Examines questions arising under the First and Fourteenth Amendments.
Prerequisite: Government 210.
216b. Maine Politics. Fall 2011. Christian P. Potholm.
An analysis of politics in the state of Maine since World War II. Subjects covered include the dynamics of Republican and Democratic rivalries and the efficacy of the Independent voter, the rise of the Green and Reform parties, the growing importance of ballot measure initiatives, and the interaction of ethnicity and politics in the Pine Tree State. An analysis of key precincts and Maine voting paradigms is included, as well as a look at the efficacy of such phenomena
as the north/south geographic split, the environmental movement, and the impact of such interest groups as SAM, the Tea Party, and the Roman Catholic Church. Students are expected to follow contemporary political events on a regular basis.
219c. Education and Law. Every other year. Fall 2011. George S. Isaacson.
A study of the impact of the American legal system on the functioning of schools in the United States through an examination of Supreme Court decisions and federal legislation. Analyzes the public policy considerations that underlie court decisions in the field of education and considers how those judicial interests may differ from the concerns of school boards, administrators, and teachers. Issues to be discussed include constitutional and statutory developments affecting schools in such areas as free speech, sex discrimination, religious objections to compulsory education, race relations, teachers' rights, school financing, and education of the handicapped. (Same as Education 250.)

## [220b. The Politics of Development: Poverty, Prosperity, and Political Change.]

221b. Division and Consensus: The Government and Politics of Ireland. Fall 2011. Shelley M. Deane.

Familiarizes students with the contemporary politics and political history of the two jurisdictions on the Island of Ireland. Provides an understanding of the political institutions in Ireland north and south; studies constitutional and public policy issues such as church and state, while offering the means to critically assess the relevance of social science theories of nationalism, religion, and conflict resolution to the Ireland case.
[222b - IP. Politics and Societies in Africa. (Same as Africana Studies 222.)]

224b. West European Politics. Fall 2011. Nicholas H. Toloudis.

Analyzes the dynamics of West European political systems, including the varieties of parliamentary and electoral systems and the formation of governments and lawmaking. Addresses contemporary political challenges in Britain, France, Germany, Italy, and other states, considering topics such as institutional reform, welfare state policies, economic growth and unemployment, immigration, relations with the United States, and other foreign policy concerns. The European Union is not examined, as it is a separate course, Government 225: The Politics of the European Union.

225b - IP. The Politics of the European Union. Spring 2012. Nicholas H. Toloudis.
Explores the historical foundations, scope, and consequences of European political and economic integration since 1951. Examines how the European Union's supranational political institutions, law, and policies have developed and how they affect the domestic politics of member states. Considers challenges faced by the European Union: enlargement to include Eastern European members, the loss of national sovereignty and the "democratic deficit," the creation of a European identity, and the development of a coordinated foreign policy.
226b. Government and Politics of the Middle East. Fall 2011. Shelley M. Deane.
A study of the politics of the Middle East region. Begins with a history of the region, focusing on the period since the end of World War I and the collapse of the Ottoman Empire. Proceeds to examine a number of topics of importance in the contemporary politics of the region. Some of the major topics addressed are colonialism and its legacy; nationalism; religion and politics; authoritarianism, democratization, and civil society; ethnicity and sectarianism; regional security and the role of outside powers. Presumes no previous knowledge of the region.

227b - IP. Contemporary Chinese Politics. Fall 2011. Christopher Heurlin.
Examines Chinese politics in the context of a prolonged revolution. After a survey of the political system as established in the 1950s and patterns of politics emerging from it, the analytic focus turns to political change in the reform era (since 1979) and the forces driving it. Topics include the political impact of decentralization and marketization, the reintegration into the capitalist world economy, and the development of the legal system. The adaptation by the Communist Party to these changes and the prospects of democratization are also examined. (Same as Asian Studies 227.)

## [230b. Post-Communist Russian Politics and Society.]

232b - ESD, IP. Japanese Politics and Society. Fall 2011. Henry C. W. Laurence.
Comprehensive overview of modern Japanese politics in historical, social, and cultural context. Analyzes the electoral dominance of the Liberal Democratic Party, the nature of democratic politics, and the rise and fall of the economy. Other topics include the status of women and ethnic minorities, education, wat guilt, nationalism, and the role of the media. (Same as Asian Studies 282.)

233b. Advanced Comparative Politics: Government, War, and Society. Every spring. Spring 2012. Christian P. Potholm.
An examination of the forces and processes by which governments and societies approach and wage or avoid wars. The theories and practices of warfare of various political systems will be analyzed and particular attention will be paid to the interface where politics, society, and the military come together under governmental auspices in various comparative contexts. Specific examples from Africa, Asia, Europe, and North America are examined.

236b. Global Media and Politics. Spring 2012. Henry C. W. Laurence.
Examines the relationship between politics, democracy, and the mass media (television, newspapers, the Internet, and "pop" culture), in cross-national perspective. Explores the different relationships between press and politicians, the political economy of global multimedia conglomerates, the commercialization and sensationalization of television news, the cultural impact of "Western" television in non-Western countries, the impact of the Internet on non-democratic regimes, and the use of media to create or distort ethnic and national identities. Special, but not exclusive, focus on the United States, Britain and Asia.

## [237b - ESD. The Politics of Ethnicity: Construction and Mobilization of Ethnic Identity Claims.]

## [239b. Comparative Constitutional Law.]

240b. Classical Political Philosophy. Fall 2011. Jean M. Yarbrough.
A survey of classical political philosophy focusing on four major works: Thucydides' History of the Peloponnesian War, Plato's Republic, Aristotle's Politics, and St. Augustine's City of God. Examines ancient Greek and early Christian reflections on human nature, justice, the best regime, the relationship of the individual to the political community, the relationship of philosophy to politics, democracy, education, religion, and international relations.
241b. Modern Political Philosophy. Spring 2012. Paul N. Franco.
A survey of modern political philosophy from Machiavelli to Mill. Examines the overthrow of the classical horizon, the movement of human will and freedom to the center of political thought, the idea of the social contract, the origin and meaning of rights, the relationship

## Courses of Instruction

between freedom and equality, the role of democracy, and the replacement of nature by history as the source of human meaning. Authors may include Machiavelli, Hobbes, Locke, Hume, Rousseau, Kant, Hegel, and Mill.

## 243b. Might and Right among Nations. Fall 2011. Seth N. Jaffe.

Anchored by a reading of Thucydides' History of the Peloponnesian War, an examination of justice among nations, focusing on the relationship between justice and necessity in the work of ancient and modern authors. Explores the question of whether international justice is genuine or largely spurious, the extent to which nations are bound to consider the good of other nations, to what extent it is reasonable to expect them to do so, as well as the prospects for a just international order. Readings will include Walzer and Thucydides and may include Cicero, Aquinas, Machiavelli, Grotius, Montesquieu, and Kant.

## [244b. Liberalism and Its Critics.]

245b. Contemporary Political Philosophy. Spring 2012. Paul N. Franco.
A survey of political philosophy in Europe and the United States since 1945. Examines a broad array of topics, including the revival of political philosophy, relativism, rationalism, contemporary liberal theory, communitarianism, conservatism, multiculturalism, feminism, and postmodernism. Authors may include Strauss, Arendt, Oakeshott, Berlin, Hayek, Rawls, Sandel, Taylor, Walzer, Okin, Habermas, and Foucault.

## 246b. Religion and Politics. Fall 2011. Paul N. Franco.

Examines the relationship between religion and politics-the so-called theological-political question-primarily in modern Europe and America. Focuses first on the tension between and eventual separation of church and state in the early modern period; then considers the implications and complications of this historic separation, looking at recent Supreme Court cases, as well as contemporary discussion of the relationship between religion and politics. Comparisons with the treatment of this issue in the Islamic world are made. Authors include Machiavelli, Luther, Calvin, Spinoza, Locke, Jefferson, Madison, Tocqueville, as well as a variety of contemporary and Islamic writers.

250b. American Political Thought. Spring 2012. Jean M. Yarbrough.
Examines the political thought of American statesmen and writers from the founding to the twentieth century, with special emphasis on three pivotal moments: the Founding, the Crisis of the House Divided, and the growth of the modern welfare state. Readings include the Federalist Papers, the Anti-federalists, Jefferson and Hamilton, Calhoun, Lincoln, William Graham Sumner, the Progressives, Franklin Delano Roosevelt, and contemporary thinkers on both the right and the left.

## 255b. Quantitative Analysis in Political Science. Spring 2012. Michael M. Franz.

Examines the use of quantitative methods to study political phenomena. Discusses the nature of empirical thinking and how principles used for years by natural scientists, such as causation and control, have been adopted by social scientists. Introduces what these methods are and how they might be useful in political reseatch, and applies these methods, with particular emphasis on the use of survey data. Using quantitative methods, employs statistical computing software as a research tool, with a focus on effective presentation of data and results. This course might be useful to those who are considering a senior honors project.

260b. International Law. Fall 2011. Allen L. Springer.
The modern state system, the role of law in its operation, the principles and practices that have developed, and the problems involved in their application.

263b. International Environmental Policy. Spring 2012. Allen L. Springer.
Examines the political, legal, and institutional dimension of international efforts to protect the environment. Problems discussed include transboundary and marine pollution, maintaining biodiversity, and global climate change. (Same as Environmental Studies 263.)
[264b. Climate Change and Energy Policy. (Same as Environmental Studies 264.)]
[265b. International Political Economy.]
[268b. Bridging Divisions: Ethnonational Conflict Regulation.]
270b. United States Foreign Policy. Spring 2012. Seth N. Jaffe.
Examines the development and conduct of United States foreign policy. Analyzes the impact of intragovernmental rivalries, the media, public opinion, and interest groups on the policymaking process, and provides case studies of contemporary foreign policy issues.
272b. United States-China Relations. Spring 2012. Christopher Heurlin.
Examines the development of United States relations with China. Begins with a brief historical examination of the Opium War, then examines United States policy towards the Nationalists and the Communists during the Chinese Civil War. In the aftermath of the civil war and subsequent revolution, the role of China in the Cold War discussed. Then focuses on more contemporary issues in United States-China relations, drawing links between the domestic politics of both countries and how they influence the formulation of foreign policy. Contemporary issues addressed include human rights, trade, the Taiwanese independence movement, Tibet, nationalism, and China's growing economic influence in the world. (Same as Asian Studies 265.)

273b - IP. War, Government, and Politics in Iraq. Spring 2012. Shelley M. Deane.
Principle themes include the wars, governments, and politics of Iraq past and present. Examines the role of Iraq's allies and adversaries in the Middle East; addresses mechanisms of minority control, issues of governance, representation and resources over time. Provides a grounding in the development of a diverse, resource rich, multiethnic state, strategically significant and subject to a series of international interventions. Students will be able to apply the tools of government to internal Iraqi state dynamics, regional state relations, and international involvement in the making of Modern Iraq.

275b. Rioters, Rebels, and Revolutionaries: Contentious Politics. Fall 2011. Christopher Heurlin.

Examines the rough and tumble world of contentious politics, which includes forms of social mobilization as diverse as riots, revolutions, and rebellions. While much of "routine politics" takes place through elections, examines activities that cross over into the extraordinary and asks questions such as: What is the relationship between elections and riots? Why do some revolutionary movements succeed while others fail? Given great personal risks, why do some people protest in dictatorships? How do states respond to protests and why? Examines the commonalities and differences between these diverse events through case studies throughout the developing world, including Asia, Latin America, and the Middle East.

## Courses of Instruction

## 283b. Social Movements and Popular Protest. Fall 2011. Nicholas H. Toloudis.

Analyzes the role of social movements in generating political change on issues such as civil rights, environmentalism, women's rights, indigenous rights, and globalization. Considers different theoretical approaches to understanding the emergence, sustenance, and effectiveness of social movements. Comparative analysis of cases from North and South America, Europe, and other regions in time periods dating as far back as the nineteenth century. Concludes with discussion of twenty-first-century political activism in the context of globalization and the changing status of the national state in world politics.

## 284b. The Politics of the Family. Spring 2012. Brian Duff.

Focuses on how the development of ideas about modern citizenship has gone hand in hand with changes in the ways that people think about families and live their familial lives, and the particular ways this relationship affects American politics. Looks at the way that the experience of having and raising a child has become an important part of what we think it means to be a good citizen in a democracy. Examines modern political theory, the development of psychoanalytic approaches to the study of politics, and contemporary policy and political rhetoric. Topics include why changes in ideas about family seem so politically threatening to some groups, whether the ideas about authority and freedom that animate politics are rooted in the family, and the role of rhetoric about the family in the rhetoric of political leaders and in the political attitudes of ordinary citizens.

291b-294b. Intermediate Independent Study in Government. The Department.

## Level C Courses

Level C courses provide seniors and juniors with appropriate background the opportunity to do advanced work within a specific subfield. Enrollment is limited to fifteen students in each seminar. Priority is given to senior majors, then junior majors, particularly those with a concentration in the subfield. Sophomores may enroll with permission of the instructor. These courses are not open to first-year students.
303b. The Law and Politics of Freedom of Speech. Fall 2011. Richard E. Morgan.
While focusing primarily on American material, students have the option of choosing speech controversies in other polities as the subject of their seminar papers.

## 304b. Advanced Seminar in American Politics: Presidential-Congressional Relations.

 Spring 2012. Janet M. Martin.Examines presidential-congressional relations through a number of perspectives, including use of historical, quantitative, and institutional analyses. Readings consider the relationship between the executive branch and Congress in both the domestic arena (including regulatory and budgetary policy) and in the area of foreign and defense policy.
308b. Money and Politics. Spring 2012. Michael M. Franz.
Considers the historical and contemporary relationship between money and government. In what ways have moneyed interests always had distinctive influences on American politics? Does this threaten the vibrancy of our representative democracy? Are recent controversies over campaign finance reform and lobbying reform signs that American government is in trouble? Reading, writing, and discussion intensive, considers the large academic literature on this subject, as well as the reflections of journalists and political practitioners, with the overall goal of understanding the money/politics relationship in ways that facilitate the evaluation of American democracy.
[309b. American Political Development.]
[321b. Social Protest and Political Change.]
[324b. Post-Communist Pathways.]
[325b. State-Building in Comparative Perspective.]
327b. Political Development in the West. Spring 2012. Nicholas H. Toloudis.
Examines the formation and evolution of political institutions in the Western world. We will conduct this examination by studying relevant theoretical debates, including the concept of "political development" itself, along with the political, economic, and social histories of Europe and the United States. Topics include the formation of the nation state, the creation of nations and nationalism, the emergence of democracy, mass politics and welfare states, and the phenomena of globalization and European unification in the late twentieth centuries.

330b. Ending Civil Wars. Spring 2012. Shelley M. Deane.
Considers the means and mechanisms adopted to end civil wars. Examines the nature of postconflict transformation and negotiated settlements. As wars end, peace settlements are varied and complex, often negotiated and agreed, sometimes imposed. Considers associated issues of insecurity, the nature of the settlement reached, the problems of implementation, and third party intervention, along with the dilemmas associated with peacekeeping and enforcement. The transition from war to settlement implementation is considered theoretically and empirically. Historical and contemporary civil wars selected from every continent illuminate the theoretical imperatives associated with implementing peace agreements.

332b. Advanced Seminar in Japanese Politics. Spring 2012. Henry C. W. Laurence.
Analyzes the political, social, and cultural underpinnings of modern politics, and asks how democracy works in Japan compared with other countries. Explores how Japan has achieved stunning material prosperity while maintaining among the best healthcare and education systems in the world, high levels of income equality, and low levels of crime. Students are also instructed in conducting independent research on topics of their own choosing. (Same as Asian Studies 332.)

Prerequisite: Asian Studies 282 (same as Government 232).
[337b. Advanced Seminar in Democracy and Development in Asia. (Same as Asian Studies 337.)]
341b. Advanced Seminar in Political Theory: Tocqueville. Spring 2012. Jean M. Yarbrough.
More than 150 years after its publication, Democracy in America remains the most powerful sympathetic critique of modern liberal democracy ever written. Careful reading of the text and selected secondary sources leads to examination of Tocqueville's analysis of the defects to which the democratic passion for equality gives rise and consideration of possible solutions that, in contrast to the Marxist and Nietzschean critiques, aim at preserving the liberal democratic way of life.
[342b. Advanced Seminar in Political Theory: Jean-Jacques Rousseau.]
361b. Advanced Seminar in International Relations: Conflict Simulation and Conflict Resolution. Spring 2012. Christian P. Potholm.

An upper-level interdisciplinary seminar on the nature of both international and national conflict. A variety of contexts and influence vectors are examined and students are encouraged to look at the ways conflicts can be solved short of actual warfare, as well as by it.

## Courses of Instruction

363b. Advanced Seminar in International Relations: Law, Politics, and the Search for Justice. Spring 2012. Allen L. Springer.

Examines the complex relationship between law and policy in international relations by focusing on two important and rapidly developing areas of international concern: environmental protection and humanitarian rights. Fulfills the environmental studies senior seminar requirement. (Same as Environmental Studies 363.)

393c. Religious Culture and Politics in Southeast Asia. Spring 2012. John Holt.
An examination and discussion of the ways in which changes in political economy and society have fostered fundamental changes in the religious cultures of modern Southeast Asia. Questions include: How have conceptions of power embedded in the traditional Buddhist concepts of the mandala and kingship been sustained or contested in contemporary Thai, Burmese, Lao, and Khmer politics? How have contemporary machinations of governments in Burma, Thailand, Laos, and Cambodia contributed to transformations in religious culture? How have religious ideas and practices abetted resistance to state hegemony in the highland communities of Burma, Laos, and Thailand? How are the deaths of war combatants and civilians remembered and commemorated in Vietnam and Cambodia? (Same as Asian Studies 344 and Religion 344.)
[395b. Advanced Seminar in Environmental Policy and Politics. (Same as Environmental Studies 395.)]

401b-404b. Advanced Independent Study and Honors in Government. The Department.

## History

K. Page Herrlinger, Department Cbair<br>Josephine C. Johnson, Department Coordinator

Professors: Thomas Conlan $\dagger$ (Asian Studies), Daniel Levine, Olufemi Vaughan (Africana
Studies), Allen Wells
Associate Professors: Connie Y. Chiang (Environmental Studies), Dallas G. Denery II, David
Gordon, K. Page Herrlinger, Matthew Klingle $\dagger$ (Environmental Studies), Sarah F. McMahon**,
Patrick J. Rael $\dagger$, Rachel L. Sturman (Asian Studies), Susan L. Tananbaum
Assistant Professors: David Hecht, Meghan Roberts
Visiting Faculty: Strother Roberts
Fellow: Lori Flores

## Requirements for the Major in History

History offers the following regional fields of study: Africa, East Asia, Europe, Latin America, South Asia, and the United States. Some courses in history are designated as "transregional" because they cover more than one of these regional fields. The department also offers fields in Atlantic and Colonial Worlds, which may include these transregional courses, as well as courses that are not transregional but fit into these transregional concentrations. All history courses fall under one or more of these regional or transregional fields.
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 200 level may count toward the major, and these must be taken prior to the junior year.
2. Students may not count toward the major more than six courses in a single field of study. (Students may count transregional courses toward any one of the fields they cover.)
3. Non-Euro/U.S. courses: Majors take at least four courses in fields outside of Europe and the United States. These courses may include courses taken in the transregional fields (Atlantic Worlds and Colonials Worlds), which count toward at least one non-Euro/U.S. field. Transregional courses may count toward any one of their designated field areas, but a single course may not count toward more than one field area.
4. Pre-modern course: One pre-modern course (courses designated by professors).
5. Advanced seminars: Three courses above the level of 200 -lecture courses (i.e., 200 -level intermediate seminars, 300 -level research seminars, 400 -level advanced independent studies, or honors). These courses must be taken in at least two fields (a single course may not count toward more than one field).
6. Capstone: One of the three advanced seminars must be a 300 -level capstone seminar. In consultation with a faculty advisor, a major may fulfill this requirement with an honors project. Students are expected to have concentrated their studies in the field in which the capstone is taken by having taken at least two prior courses in the field.
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 on a graded basis (not Credit/D/Fail).

Study away: In the 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 can count toward the history major.
Honors: All history majors seeking departmental honors will enroll in at least one semester of the Honors Program (History 451, 452). 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.

## Requirements for the Minor in History

The minor consists of five courses with the following stipulations:

1. A maximum of one course taken under the 200 level (must be taken prior to junior year)
2. A maximum of one course taken at another institution (may not count as an intermediate seminar or higher)

## Courses of Instruction

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/U.S. (a transregional course that covers fields outside of Europe and the United States may count)
5. Courses that will count toward the minor must be taken on a graded basis (not Credit/D/ Fail)
6. Students participating in off-campus study may count no more than two history courses toward the history minor. This must be approved by a departmental advisor.

## Curriculum

Although first-year seminars and 100-level courses are designed as introductory courses for students who have not taken college-level courses in history, first-year students and all nonmajors may also enroll in any lecture course numbered 200-289.

Intermediate seminars, listed beginning on page 190, are not open to first-year students. Most of these seminars have a prerequisite of one history course.

Advanced seminars or Problems Courses, listed beginning on page 195, are open to history majors and minors and to other juniors and seniors with sufficient background in the discipline.

## First-Year Seminars

The following seminars, designed for first-year students, are introductory in nature. They do not assume that students have a background in the period or the area of the particular seminar topic. The seminars introduce students to the study of historical methods, the examination of particular questions of historical inquiry, and the development of analytical skills in reading and writing. The seminars are based on extensive reading, class discussion, and multiple short, critical essays. Enrollment is limited to sixteen students in each seminar.

For a full description of first-year seminars, see pages 141-51.
[10c. Monsters, Marvels, and Messiahs: Europe during the Age of Discovery.]
11c. Memoirs and Memory in American History. Fall 2011. Connie Chiang.
12c. Utopia: Intentional Communities in America, 1630-1997. Fall 2012. Sarah McMahon.
[13c. Living in the Sixteenth Century. (Same as Asian Studies 11.)]
14c. Science and Society. Fall 2011. David Hecht.
[15c. Frontier Crossings: The Western Experience in American History. (Same as Environmental Studies 15.)]
[16c. From Montezuma to Bin Laden: Globalization and Its Critics. (Same as Africana Studies 13.)]

18c. The Consumer Revolution in the Atlantic World. Fall 2011 and Fall 2012. Meghan Roberts.

20c. In Sickness and in Health: Public Health in Europe and the United States. Spring 2013. Susan Tananbaum. (Same as Gender and Women's Studies 20.)

22c. "Bad" Women Make Great History: Gender, Identity, and Society in Modern Europe, 1789-1945. Fall 2011. Page Herrlinger. (Same as Gender and Women's Studies 22.)
[25c. The Civil War in Film. (Same as Africana Studies 25.)]
[26c. Globalizing India. (Same as Asian Studies 26.)]

## Introductory, Intermediate, and Advanced Courses

For intermediate seminars at the 200 level and advanced problems courses, see pages 190-97.

## [60c. Introduction to Historical Writing.]

110c - ESD. Medieval, Renaissance, and Reformation Europe. Fall 2011. Dallas Denery.
Introductory-level lecture. A wide-ranging introduction to pre-modern European history beginning with the reign of the Roman Emperor Constantine (c. 272-337) and concluding with the Council of Trent (1545-1563). Particular attention is paid to the varying relations between church and state, the birth of urban culture and economy, institutional and popular religious movements, and the early formation of nation states. Not open to students who have credit for History 206 (Early Modern Europe) or 207 (Medieval Europe).
Note: This course fulfills the pre-modern requirement for history majors.
[125c - ESD, IP. Entering Modernity: European Jewry. (Same as Religion 125.)]
127c - ESD. Early Modern Europe, from Reformations to Revolutions. Spring 2012 and Spring 2013. Meghan Roberts.

Introductory lecture. Opens with Europe in crisis, reeling from the political, social, and religious implications of the Reformation. Closes with the continent in the grips of yet another seismic shift, that of the French Revolution. Considers how individuals, communities, and nation-states coped with these changes through the study of the Counter-Reformation, the Inquisition, warfare, state-building, absolutism, constitutionalism, the Enlightenment, and the French Revolution.

130c - ESD. North American Indian History, c. 1450 to the Present. Spring 2012. Strother Roberts.

The indigenous peoples of North America have a long and diverse history (histories, really) stretching back at least 15,000 years. This history continues today, despite narratives that tell of the closing of the frontier and the "disappearance" of native peoples. Since European explorers first united the world's two hemispheres at the turn of the sixteenth century, native communities have faced numerous challenges and fallen victim to often unimaginable hardship. Their cultures have shown amazing adaptability: embracing the opportunities of new trade networks, incorporating new religious ideas with older practices, and welcoming newcomers from Europe and Africa into their own communities. Through centuries of imperial oppression, American Indians have proven tenacious in fighting for their rights and insisting on their proper place in modern American society. This is a survey of this long and varied history.
[139c. The Civil War Era. (Same as Africana Studies 139.)]
[140c. War and Society.]
142c. The United States since 1945. Fall 2011. Daniel Levine.
Consideration of social, intellectual, political, and international history. Topics include the Cold War; the survival of the New Deal; the changing role of organized labor; Keynesian, postKeynesian, or anti-Keynesian economic policies; and the urban crisis. Readings common to the whole class and the opportunity for each student to read more deeply in a topic of his or her own choice.

## Courses of Instruction

201c - ESD. History of Ancient Greece: Bronze Age to the Death of Alexander. Fall 2011. Stephen O'Connor.

Surveys the history of Greek-speaking peoples from the Bronze Age (c. 3000-1100 B.C.E.) to the death of Alexander the Great in 323 B.C.E. Traces the political, economic, social, religious, and cultural developments of the Greeks in the broader context of the Mediterranean world. Topics include the institution of the polis (city-state); hoplite warfare; Greek colonization; the origins of Greek "science," philosophy, and rhetoric; and fifth-century Athenian democracy and imperialism. Necessarily focuses on Athens and Sparta, but attention is also given to the variety of social and political structures found in different Greek communities. Special attention is given to examining and attempting to understand the distinctively Greek outlook in regard to gender, the relationship between human and divine, freedom, and the divisions between Greeks and barbarians (non-Greeks). A variety of sources-literary, epigraphical, archaeological-are presented, and students learn how to use them as historical documents. (Same as Classics 211.)

Note: This course fulfills the pre-modern requirement for history majors.
[202c. Ancient Rome. (Same as Classics 212.)]
204c. Science, Magic, and Religion. Spring 2012. Dallas Denery.
Traces the origins of the scientific revolution through the interplay between late-antique and medieval religion, magic, and natural philosophy. Particular attention is paid to the conflict between paganism and Christianity, the meaning and function of religious miracles, the rise and persecution of witchcraft, and Renaissance hermeticism. (Same as Religion 204.)
Prerequisite: History $\mathbf{1 1 0}$ or permission of the instructor.
Note: This course fulfills the pre-modern requirement for history majors.

## [205c - ESD. A History of the Body.]

206c. War and Society in the Ancient Greek World. Spring 2012. Stephen O'Connor.
Explores the dynamic relationship between the changing ways in which archaic and classical Greek societies were structured, and the ways in which the Greeks organized themselves for and conducted warfare. Examines the specifics of military organization and fighting as well as broader issues such as the causes and goals of Greek warfare, the role of ideology in determining representations of military conflicts, and the economic framework of Greek wars. Focuses especially on the current controversy concerning the origins and development of hoplite (Greek heavy infantry) warfare and its role in shaping the institutions of the Greek polis (city-state), and how we can use our archeological, iconographic, and literary sources to reconstruct the realities of hoplite battle. Concludes by investigating to what extent ancient Greek infantry warfare, with its emphasis on close-order shock combat, has provided a model for Western warfare to this day. (Same as Classics 213.)

## 215c - ESD. The Making of Modern Europe, 1815-1918. Spring 2013. Page Herrlinger.

Survey course of the "long nineteenth century" in Europe, from 1815 to the end of the First World War, with an emphasis on the social, cultural, and political impact of industrial and technological "progress." Explores the way people lived and thought about the world around them as Europe industrialized, as well as the ambivalence that many Europeans came to attach to "modernity" by the end of the Great War in 1918.

218c - ESD, IP. The History of Russia, 1725-1924. Fall 2011. Page Herrlinger.
Explores Russian society, culture, and politics during three dramatically different phases of the modern period: the Old Regime under the Tsars in the eighteenth and nineteenth centuries; the violent, revolutionary transformations of 1905 and 1917; and the founding years of socialist rule under Lenin and the Bolsheviks. Readings drawn from a diverse range of primary sources (including petitions, letters, memoirs, official proclamations, ethnographic accounts) as well as secondary works written by leading scholars. Also draws widely on contemporary visual culture (including, but not limited to, painting, photography, and film).


#### Abstract

219c - ESD, IP. Russia's Twentieth Century: Revolution and Beyond. Fall 2012. Page Herrlinger.

Examines major transformations in Russian society, culture, and politics from the Revolutions of 1917 through the fall of the Soviet Empire to 2000. Topics include the building of socialist society under Lenin and Stalin, the political Terror of the 1930s and the expansion of the Gulag system, the experience of World War II, Soviet influence in Central Asia and Eastern Europe, attempts at de-Stalinization under Khrushchev, everyday life under "developed socialism," the period of "glasnost" and "perestroika" under Gorbachev, and the problems of de-Sovietization in the 1990s.


220c - ESD. History of the Holocaust. Spring 2013. Susan Tananbaum.
An analysis of the persistence of anti-Jewish attitudes through history, with an emphasis on the Hitler regime's attempt to destroy European Jews and their culture. Begins with a brief overview of the Greco-Roman world and Medieval Europe and concludes with an examination of the cultural phenomenon of antisemitism and the destruction of European Jewry. Readings focus on primary texts and secondary analysis. Students will have the opportunity to develop individual research projects.
221c - IP. History of England, 1485-1688. Spring 2012. Susan Tananbaum.
A survey of the political, cultural, religious, social, and economic history of early modern England, from the reign of Henry VII, the first Tudor ruler, to the outbreak of the Glorious Revolution. Topics include the Tudor and Stuart Monarchs, the Elizabethan Settlement, the English Civil War, Oliver Cromwell, and the Restoration.

Note: This course fulfills the pre-modern requirement for history majors.
223c - IP. Modern Britain, 1837 to the 1990s. Fall 2012. Susan Tananbaum.
A social history of modern Britain from the rise of urban industrial society in the early nineteenth century to the present. Topics include the impact of the industrial revolution, acculturation of the working classes, the impact of liberalism, the reform movement, and Victorian society. Concludes with an analysis of the domestic impact of the world wars and of contemporary society.
224c - ESD, IP. The Modern Middle East: The Palestinian-Israeli Conflict. Fall 2011. Susan Tananbaum.

A historical overview of the Middle East during the nineteenth and twentieth centuries. Focuses on the disintegration of the Ottoman Empire; the role of Islam; British rule in the region; Palestine, Jewish, and Arab nationalism; the intifada; and ends with a brief review of contemporary issues.

227c - IP. City and Landscape in Modern Europe. Fall 2012. Jill Pearlman.
Explores the evolution of the built environment in London, Paris, Vienna, and Berlin from the mid-nineteenth century to the present. Focusing on significant moments in the history of these cities, considers a variety of factors as determinants of urban form, including technological developments, industrialization, politics, economics, culture and design. Topics include the creation of capital cities, natural and public spaces, streets, housing, suburbanization, environmental problems, and current schemes for a sustainable urbanism. (Same as

## Environmental Studies 227.)

229c - ESD. Science, Sex, and Politics. Spring 2012. David Hecht.
Examines the intersection of science, sex, and politics in twentieth-century United States history. Issues of sex and sexuality have been contested terrain over the past hundred years, as varying conceptions of gender, morality, and "proper" sexual behavior have become politically and socially controversial. Explores the way that science has impacted these debates-often as a tool by which activists of varying political and intellectual persuasions have attempted to use notions of scientific objectivity and authority to advance their agendas. Explores debates over issues such as birth control, eugenics, abortion, and the "gay gene." (Same as Gay and Lesbian Studies 229 and Gender and Women's Studies 230.)

231c - ESD. Colonial America and the Atlantic World, 1607-1763. Spring 2013. Sarah McMahon.

A social history of the emigration to and founding and growth of the colonies in British North America. Explores the difficulties of creating a new society, economy, polity, and culture in an unfamiliar and already inhabited environment; the effects of diverse regional and national origins and often conflicting goals and expectations on the early settlement and development of the colonies; the gradual adaptations and changes in European, Native American, and African cultures, and their separate, combined, and often contested contributions to a new "provincial," increasingly stratified (both socially and economically), and regionally disparate culture; and the later problems of maturity and stability as the thirteen colonies began to outgrow the British imperial system and become a new "American" society.

Note: This course fulfills the pre-modern requirement for history majors.

## 232c - ESD. History of the American West. Fall 2011. Connie Chiang.

Survey of what came to be called the Western United States from the nineteenth century to the present. Topics include Euro-American relations with Native Americans; the expansion and growth of the federal government into the West; the exploitation of natural resources; the creation of borders and national identities; race, class, and gender relations; the influence of immigration and emigration; violence and criminality; cities and suburbs; and the enduring persistence of Western myths in American culture. Students write several papers and engage in weekly discussion based upon primary and secondary documents, art, literature, and film. (Same as Environmental Studies 232.)

233c - ESD. American Society in the New Nation, 1763-1840. Fall 2013. Sarah McMahon.
A social history of the United States from the Revolution to the Age of Jackson. Topics include the various social, economic, cultural, and ideological roots of the movement for American independence; the struggle to determine the scope of the Constitution and the political shape of the new republic; the emergence of and contest over a new social and cultural order and the nature of American "identity"; and the diverging social, economic, and political histories of regions (North, South, and trans-Appalachian West) and peoples
in the early to mid-nineteenth century. Topics include urbanization, industrialization, and the development of new forms of social organization in the North; religion and the Second Great Awakening; the westward expansion of the nation into areas already occupied; the southern plantation economy and slave communities; and the growth of the reform impulse in Jacksonian America.
[234c - ESD. Lawn Boy Meets Valley Girl: Gender and the Suburbs. (Same as Gender and Women's Studies 235.)]
[235c - ESD. Borderlands and Empires in Early North America. (Same as Environmental Studies 235 and Latin American Studies 236.)]
[236c - ESD. The History of African Americans, 1619-1865. (Same as Africana Studies 236.)]
[237c - ESD. The History of African Americans from 1865 to the Present. (Same as Africana Studies 237.)]

242c - ESD. Environment and Culture in North American History. Every year. Spring 2012. Connie Chiang.

Explores relationships between ideas of nature, human transformations of the environment, and the effect of the physical environment upon humans through time in North America. Topics include the "Columbian exchange" and colonialism; links between ecological change and race, class, and gender relations; the role of science and technology; literary and artistic perspectives of "nature"; agriculture, industrialization, and urbanization; and the rise of modern environmentalism. (Same as Environmental Studies 203.)
Prerequisite: Environmental Studies 101 or permission of the instructor.
243c -ESD. Old Regime and Revolutionary France. Fall 2011. Meghan Roberts.
At the beginning of the eighteenth century, many heralded King Louis XIV as the most powerful monarch to ever rule. By the end of the century, however, the French people overthrew this vaunted monarchy. Topics include: Why did France have a revolution? What conflicts-social, cultural, and intellectual-helped shape politics and society? What were the global implications of events in France, especially for the enslaved populations of French colonies? How did the Revolution impact everyday life, including social relationships and material culture? Why did the French Revolution become radical and-all too often-violent?
[244c - VPA. City, Anti-City, Utopia: Building Urban America. (Same as Environmental Studies 244.)]
246c - ESD. Women in American History, 1600-1900. Spring 2014. Sarah McMahon.
A social history of American women from the colonial period through the nineteenth century. Examines women's changing roles in both public and private spheres; the circumstances of women's lives as these were shaped by class, ethnic, and racial differences; the recurring conflict between the ideals of womanhood and the realities of women's experience; and focuses on family responsibilities, paid and unpaid work, religion, education, reform, women's rights, and feminism. (Same as Gender and Women's Studies 251.)

248c - ESD. Family and Community in American History, 1600-1900. Fall 2012. Sarah McMahon.
Examines the social, economic, and cultural history of American families from 1600 to 1900 , and the changing relationship between families and their kinship networks, communities,

## Courses of Instruction

and the larger society. Topics include gender relationships; racial, ethnic, cultural, and class variations in family and community ideals, structures, and functions; the purpose and expectations of marriage; philosophies of child-rearing; organization of work and leisure time; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life and community organization. (Same as Gender and Women's Studies 248.)
[252c - IP. Colonial Latin America. (Same as Latin American Studies 252.)]
255c - IP. Modern Latin America. Fall 2011. Allen Wells.
Traces the principal economic, social, and political transformations from the wars of independence to the present. Topics include colonial legacies and the aftermath of independence; the consolidation of nation-states and their insertion in the world economy; the evolution of land and labor systems, and the politics of reform and revolution, and the emergence of social movements. (Same as Latin American Studies 255.)
258c - IP. Latin American Revolutions. Spring 2012. Allen Wells.
Examines revolutionary change in Latin America from a historical perspective, concentrating on four cases of attempted revolutionary change-Cuba, Chile, Nicaragua, and Guatemala. Popular images and orthodox interpretations are challenged and new propositions about these processes are tested. External and internal dimensions of each of these social movements are analyzed and each revolution is discussed in the full context of the country's historical development. (Same as Latin American Studies 258.)
[261c - ESD, IP. The Making of Modern India. (Same as Asian Studies 256.)]
262c - ESD, IP. Africa and the Atlantic World, 1400-1880. Fall 2011. David Gordon.
A survey of historical developments before conquest by European powers, with a focus on west and central Africa. Explores the political, social, and cultural changes that accompanied the intensification of Atlantic Ocean trade and revolves around a controversy in the study of Africa and the Atlantic World: What influence did Africans have on the making of the Atlantic World, and in what ways did Africans participate in the slave trade? How were African identities shaped by the Atlantic World and by the slave plantations of the Americas? Ends by considering the contradictory effects of Abolition on Africa. (Same as Africana Studies 262.)

Note: This course fulfills the pre-modern requirement for history majors.
[263c - ESD, IP. Politics and Popular Culture in Twentieth-Century India. (Same as Asian Studies 258.)]

264c - ESD, IP. Conquest, Colonialism, and Independence: Africa since 1880. Spring 2012. David Gordon.

Focuses on conquest, colonialism, and its legacies in sub-Saharan Africa; the violent process of colonial pacification, examined from European and African perspectives; the different ways of consolidating colonial rule and African resistance to colonial rule, from Maji Maji to Mau Mau; and African nationalism and independence, as experienced by Africa's nationalist leaders, from Kwame Nkrumah to Jomo Kenyatta, and their critics. Concludes with the limits of independence, mass disenchantment, the rise of the predatory post-colonial state, genocide in the Great Lakes, and the wars of Central Africa. (Same as Africana Studies 264.)
[265c - IP. Mogadishu to Madagascar: East African History. (Same as Africana Studies 268.)]
[266c - IP. History of Mexico. (Same as Latin American Studies 266.)]
[268c - ESD. Asian American History, 1850-Present.]
271c - ESD. A Bold New World?: The European Enlightenment. Fall 2012. Meghan Roberts.

What was the Enlightenment? What changes did its major thinkers aspire to bring about in their world? What can a study of the Enlightenment tell us about the relationship between Europe and the wider world? Examines a wealth of primary sources written by German, French, Dutch, and British writers that detail ambitious plans to remake society and the world. Pays particular attention to Enlightenment debates on religion, government, gender, race, and slavery, and considers the social and political consequences of those debates.

273c - ESD. The History of Latinos in the United States. Fall 2011. Lori Flores.
A survey of the social, political, and cultural history of Latinos, the fastest-growing population in the United States, from 1848 to the present. Readings and films focus on the experiences of Mexican American, Puerto Rican, Dominican, Cuban, and Central American communities as separate groups and living among each other. Key course topics include legacies of conquest; past and present immigration; inclusion and exclusion; labor movements and activism; articulations of race, gender, and citizenship in urban and rural settings; transnationalism; the development of Latino politics; border violence; and Latino futurism. Aims to both show the particularities of the Latino experience in the United States and position Latinos as integral figures to more inclusive and revised narratives of the nation's past. (Same as Latin American Studies 273.)

274c - IP. The Shot Heard 'Round the World: The History of the American Revolution. Fall 2011. Strother Roberts.

For those who lived through it, the American Revolution was a very personal experience. It pitted neighbors against neighbors, tore local communities apart, and destroyed families. It ruined livelihoods and ended lives. But the Revolution was also a global phenomenon. Its ideological origins lay in ancient Greece and Rome. Its economic causes stretched around the globe to the tea plantations of China. It spawned battles fought from the icy tundra of the subarctic to the tropical waters of the Caribbean. Its ideals and values have inspired generations from around the globe. Only by studying the complexity of the Revolution, by placing the local experiences of newly minted Americans within the global backdrop of their times, can this formative stage of United States history be fully understood.
[275c - ESD, IP. The Making of Modern China: 1550 to Present. (Same as Asian Studies 275.)]
[276c - ESD, IP. China's Origins and Transformations: Prehistory to 1550. (Same as Asian Studies 276.)]

280c - ESD, IP. Imperialism, Nationalism, Human Rights. Spring 2012. Rachel Sturman.
Examines the history of modern global imperialism and colonialism from the sixteenth through the twentieth centuries. Focuses on the parallel emergence of European nationalism, imperialism, and ideas of universal humanity, on the historical development of anti-colonial nationalisms in the regions ruled by European empires, and on the often-contentious nature of demands for human rights. Emphasis on the history of South Asia, with significant attention to Latin America and Africa. (Same as Asian Studies 230.)

## Courses of Instruction

282c - ESD, IP. India and the Indian Ocean World. Fall 2011. Rachel Sturman.
Explores the vibrant social world created by movements of people, commodities, and ideas across the contemporary regions of the Middle East, East Africa, South and Southeast Asia from the early spread of Islam through the eighteenth century, with a focus on early modern India. Key topics include pre-modern trade and material cultures, religious conversion, and the development of systems of knowledge in the era before the rise of European colonialism. (Same as Asian Studies 236.)

Note: This course fulfills the pre-modern requirement for history majors.
283c - ESD, IP. The Origins of Japanese Culture and Civilization. Fall 2012 and 2013. Thomas D. Conlan.

How do a culture, a state, and a society develop? Designed to introduce the culture and history of Japan by exploring how "Japan" came into existence, and to chart how patterns of Japanese civilization shifted through time. Attempts to reconstruct the tenor of life through translations of primary sources, and to lead to a greater appreciation of the unique and lasting cultural and political monuments of Japanese civilization. (Same as Asian Studies 283.)

Note: This course fulfills the pre-modern requirement for history majors.
284c - ESD, IP. The Emergence of Modern Japan. Spring 2013. Thomas D. Conlan.
What constitutes a modern state? How durable are cultures and civilizations? Examines the patterns of culture in a state that managed to expel European missionaries in the seventeenth century, and came to embrace all things Western as being "civilized" in the mid-nineteenth century. Compares the unique and vibrant culture of Tokugawa Japan with the rapid program of late-nineteenth-century industrialization, which resulted in imperialism, international wars and, ultimately, the postwar recovery. (Same as Asian Studies 284.)

## Intermediate Seminars

The following seminars offer the opportunity for more intensive work in critical reading and discussion, analytical writing, library or archival research, and thematic study than is available in the intermediate ( 200 -level) lecture courses. They are intended for majors and non-majors alike, but, because they are advanced intermediate courses, they assume some background in the discipline and may require previous course work in history or the permission of the instructor (see individual course descriptions for prerequisites). Enrollment is limited to sixteen students. The intermediate seminars are not open to first-year students. They do not fulfill the history major requirement for a 300 -level seminar.
[200c. Creating the World: Genesis and Its Interpreters. (Same as Religion 200.)]
207c - IP. Age of Atlantic Revolutions. Spring 2013. Meghan Roberts.
Seminar. Focuses upon the Age of Revolutions through an analysis of the American, French, Haitian, and Latin American revolutions. Explores how these revolutions were connected to each other, what common social assumptions they shared, and how the ideals of earlier revolutions inspired those that came later. Students also consider the differences between each revolution, including an examination of how and why people who supported revolution in one national context might condemn seemingly similar revolutions elsewhere.

208c. The History of History. Spring 2012. Dallas Denery.
Seminar. What is history and how do we come to know it? Does history follow a plan and, if so, what sort of plan? Examines the practice of historical inquiry from the ancient
world to Marx, with particular emphasis on the way in which religious thought has shaped conceptions of history. Topics include apocalyptic history, conspiracy theory, and bad history.

Prerequisite: One course in history.
Note: This course fulfills the pre-modern requirement for history majors.

## [210c. On the Origins of Modernity.]

211c - ESD. Holocaust: History and Historiography. Fall 2011. Susan Tananbaum.
Seminar. Explores several topics in the history of the Holocaust. Considers the European context and Jewish life in Europe on the eve of World War II. In particular, reviews historical debates in order to understand differing interpretations of the past. Topics include antiSemitism, responses of surrounding populations, Jewish leadership, resistance, and the role of the Church.

## 212c. Imagining the Perfect Society: Utopian and Revolutionary Thought in Russia, 1789-1917. Spring 2012. Page Herrlinger.

Seminar. Explores currents in Russian thought, with special emphasis on Russia's ongoing dialogue with (and critique of) the West, as well as at the unique role of the intelligentsia in the Russian society. Topics will include individualism, religion and spirituality, national identity, masculinity/femininity, modernity, liberalism, materialism, and varieties of socialism.
213c. Transnational Africa and Globalization. Fall 2011. Olufemi Vaughan.
Seminar. Drawing on key readings on the historical sociology of transnationalism since World War II, examines how postcolonial African migrations transformed African states and their new transnational populations in Western countries. Discusses what concepts such as the nation state, communal identity, global relations, and security mean in the African context to critically explore complex African transnational experiences and globalization. These dynamic African transnational encounters encourage discussions on homeland and diaspora, tradition and modernity, gender and generation. (Same as Africana Studies 213.)
216c. History of African and African Diasporic Political Thought. Spring 2012. Olufemi Vaughan.

Seminar. Will critically discuss some seminal works in African diaspora and African political thought in the nineteenth and twentieth centuries. Organized around global and national currents that will allow students to explore intersections in pan-African, African American, and African political thought in the context of Atlantic and global histories. Seminar topics are divided into three major historic moments. The first will explore major themes on Atlantic slavery and Western thought, notably slavery and racial representation; slavery and capitalism; slavery and democracy. The second will focus on the struggle of African Americans, Africans, and West Indians for freedom in post-Abolition and colonial contexts. Topics discussed within twentieth-century national, regional, and global currents include reconstruction and industrialization; pan-Africanism; new negro; negritude; colonialism; nationalism. Finally, explores pan-African and African encounters in the context of dominant postcolonial themes, namely decolonization; Cold War; state formation; imperialism; African diaspora feminist thought; globalism. Discusses these foundational texts and the political thoughts of major African, African American, and Caribbean intellectuals and activists in their appropriate historical context. (Same as Africana Studies 216.)

## Courses of Instruction

## 217c - ESD. The German Experience, 1918-1945. Spring 2013. Page Herrlinger.

Seminar. An in-depth inquiry into the troubled course of German history during the Weimar and Nazi periods. Among the topics explored are the impact of the Great War on culture and society in the 1920 s ; the rise of National Socialism; the role of race, class, and gender in the transformation of everyday life under Hitler; forms of persecution, collaboration, and resistance during the third Reich; Nazi war aims and the experience of war on the front and at "home," including the Holocaust.

## [222c - ESD. Family Affairs: Changing Patterns in Europe. (Same as Gender and Women's Studies 225.)]

## 225c. Image, Myth, and Memory. Spring 2012. David Hecht.

Seminar. Which matters more: what happened, or what people think happened? Starts with the assumption that cultural reaction to an event is as consequential-perhaps more so-than what actually happened. Examines the cultural reception and changing historical memory of people, events, and ideas that have been central to modern American History and History of Science. Seeks to answer questions about the nature and construction of public opinion, popular images, and historical memory-and what the consequences of such processes and understandings have been. Introduces the themes and methods of studying popular and cultural history, drawing principally from examples in the history of science and post-World War II American culture. (Possible examples include nuclear weapons, evolution, genetics, climate change, student activism, feminism, abortion, education, and presidential politics.) Then follows a workshop format, in which classes revolve around the reading and writing that students do as part of self-designed research projects-projects that may be on any subject in modern United States history.

Prerequisite: One course in history or permission of the instructor.
[226c - ESD. The City as American History. (Same as Gay and Lesbian Studies 266.)]
240c - ESD. Only a Game? Sports and Leisure in Europe and America. Fall 2012. Susan Tananbaum.

Seminar. Uses the lens of sport and leisure to analyze cultural and historical trends in modern Europe and the United States. Students read a range of primary and secondary texts exploring race, class, and gender and complete a significant research paper.

Prerequisite: Two courses in history.
241c - ESD, IP. From Gandhi to the Taliban: Secularism and Its Critics in Modern
South Asia. Fall 2011. Rachel Sturman.
Seminar. Explores modern sociopolitical movements in India and Pakistan that have sought to redefine the relationship between religion and the state. Issues considered include the meanings of secularism, the ethical claims of modern states, the development of violence and nonviolence as political programs, and the historical impacts of these diverse movements. (Same as Asian Studies 239.)
Prerequisite: One course in history or permission of the instructor.
247c. Maine: A Community and Environmental History. Spring 2014. Sarah McMahon.
Seminar. Examines the evolution of various Maine social and ecological communities-inland, hill country, and coastal. Begins with the contact of European and Native American cultures, examines the transfer of English and European agricultural traditions in the seventeenth and

## History

eighteenth centuries, and explores the development of diverse geographic, economic, ethnic, and cultural communities during the nineteenth and into the early twentieth centuries. (Same as Environmental Studies 247.)

Prerequisite: One course in history or permission of the instructor.
249c. History of Women's Voices in America. Spring 2013. Sarah McMahon.
Seminar. Examines women's voices in America from 1650 to the twentieth century, as these emerged in private letters, journals, and autobiographies; poetry, short stories, and novels; essays, addresses, and prescriptive literature. Readings from the secondary literature provide a historical framework for examining women's writings. Research projects focus on the form and content of women's literature and the ways that it illuminates women's understandings, reactions, and responses to their historical situation. (Same as Gender and Women's Studies 249.)
Prerequisite: One course in history.
[250c - ESD. California Dreamin': A History of the Golden State. (Same as Environmental Studies 250.)]
253c. The United States and Latin America: Tempestuous Neighbors. Spring 2012. Allen Wells.

Seminar. Examines scholarship on the evolution of United States-Latin American relations since Independence. Topics include the Monroe Doctrine, commercial relations, interventionism, Pan Americanism, immigration, and revolutionary movements during the Cold War. (Same as Latin American Studies 253.)
[254c. Contemporary Argentina. (Same as Latin American Studies 254.)]
[259c - ESD, IP. Sex and the Politics of the Body in India. (Same as Asian Studies 237 and Gender and Women's Studies 259.)]

260c - ESD. Labor, Gender, and Immigration in the United States-Mexico Borderlands. Spring 2012. Lori Flores.

Seminar. Explores the history of the United States-Mexico borderlands through the prisms of work, gender, and movements of people. What is the definition of a "borderland" and who or what creates one, physical or imagined? What historical moments and patterns make the United States-Mexico borderlands a unique space, and how has this space shifted and changed over time? Through readings students will analyze how labor and class, articulations and notions of gender, and immigration policies and migrant flows have impacted processes of identity formation, inclusion, and exclusion for this region's racially and ethnically diverse communities. A critical understanding of place, relations of power, historical memory, and the meanings of transnationalism are major objectives. (Same as Gender and Women's Studies 258 and Latin American Studies 260 .)
269c - ESD, IP. After Apartheid: South African History and Historiography. Spring 2012. David Gordon.

Seminar. Investigates the diverse representations and uses of the past in South Africa. Begins with the difficulties in developing a critical and conciliatory version of the past in post-apartheid South Africa during and after the much-discussed Truth and Reconciliation Commission. Then turns to diverse historical episodes and sites of memory from the Great Trek to the inauguration of Nelson Mandela to explore issues of identity and memory from the perspectives of South Africa's various peoples. (Same as Africana Studies 269.)

## Courses of Instruction

[270c. Atlantic Antislavery. (Same as Africana Studies 274.)]
272c - IP. Warlords and Child Soldiers in African History. Fall 2011. David Gordon.
Seminar. Examines how gender, age, religion, and race have informed ideologies of violence by considering various historical incarnations of the African warrior across time, including the hunter, the military slave, the revolutionary, the mercenary, the soldier, the warlord, the holy warrior, and the child soldier. Focuses on how fighters, followers, African civilians, and the international community have imagined the "work of war" in Africa. Readings include scholarly analyses of warfare, warriors, and warrior ideals alongside memoirs and fictional representations. (Same as Africana Studies 272.)

## 278c - ESD, IP. Marriage and Sexuality in Early Modern Europe and the Atlantic World. Spring 2012. Meghan Roberts.

Seminar. Explores the history of marriage and sexuality in Europe and the Atlantic World, 1400-1800. The family was the context in which most individuals experienced and contested political and cultural changes such as the Reformation and the French Revolution. As such, the history of marriage and the family allows scholars a tantalizing glimpse at how political, religious, and cultural changes affected the everyday lives of ordinary people. Considers how the structure and expression of marriage and romantic love changed in the wake of political and cultural shifts, especially colonialism, religious reform, changing definitions of race, and new political ideologies.

## 279c - ESD. Martin, Malcolm, and America. Fall 2011. Brian Purnell.

Seminar. Examines the lives and thoughts of Martin L. King Jr. and Malcolm X. Traces the development in their thinking and examines the similarities and differences between them. Evaluates their contribution to the African American freedom struggle, American society, and the world. Emphasizes very close reading of primary and secondary material; use of audio and videocassettes; lecture presentations and class discussions. In addition to being an academic study of these two men's political and religious commitment, also concerns how they inform our own political and social lives. (Same as Africana Studies 244.)

## 281c - IP. The Courtly Society of Heian Japan. Fall 2012. Thomas D. Conlan.

Seminar. Japan's courtly culture spawned some of the greatest cultural achievements the world has ever known. Using the Tale of Genji, a tenth-century novel of romance and intrigue, attempts to reconstruct the complex world of courtly culture in Japan, where marriages were open and easy, even though social mobility was not; and where the greatest elegance, and most base violence, existed in tandem. (Same as Asian Studies 281.)

Note: This course fulfills the pre-modern requirement for history majors.
285c - IP. Conquests and Heroes. Spring 2014. Thomas D. Conlan.
Seminar. Examines the experience of war in China, Japan, and Europe in order to ascertain the degree to which war is a culturally specific act. Explores narratives of battle and investigates "heroic" qualities of European, Chinese, and Japanese figures. A secondary theme constitutes an examination of the impact the thirteenth-century Mongol Invasions had on each of these military cultures. (Same as Asian Studies 285.)

Note: This course fulfills the pre-modern requirement for history majors.

286c - IP. Japan and the World. Fall 2013. Thomas D. Conlan.
Seminar. Explores Japan's relations with China, Korea, and Europe in premodern and modern contexts. Also explores larger issues of state identity and cultures in East Asia. (Same as Asian Studies 286.)

Note: This course fulfills the pre-modern requirement for history majors.
287c - ESD, IP. Kingship in Comparative Perspective. Spring 2014. Thomas D. Conlan.
Seminar. What makes a king? How does one characterize or define sovereign authority and to what degree is this culturally specific? Explores the nature of kingship through a comparative perspective, contrasting Buddhist and Confucian notions of kingship and sovereignty. Focuses on Asia (South Asia, China, and Japan), although further insight is provided through comparisons with medieval Europe. (Same as Asian Studies 287.)

## Advanced Seminars

The 300 -level problems courses in history engage students in the close investigation of certain historical "problems." Following a critical reading and discussion of representative primary and secondary sources, with attention to issues of methodology and interpretation, students develop an independent, primary research topic related to the central problem of the course, which culminates in an analytical essay of substantial length. Sufficient background in the discipline and field is assumed, the extent of it depending on whether these courses build upon courses found elsewhere in the history curriculum. Enrollment is limited to sixteen students. Majors in fields other than history are encouraged to consider these seminars.

## Problems in European History

## 307c. Topics in Medieval and Early Modern European History. Fall 2011. Dallas Denery.

A research seminar for majors and interested non-majors focusing on Medieval and Early Modern Europe. After an overview of recent trends in the historical analysis of this period, students pursue research topics of their own choice, culminating in a significant piece of original historical writing (approximately thirty pages in length).
Prerequisite: One course in history.
311c. Experiments in Totalitarianism: Nazi Germany and Soviet Russia. Fall 2012. Page Herrlinger.
Compares and contrasts the nature of society and culture under two of the twentieth century's most "totalitarian" regimes-fascism under the Nazis in Germany, and socialism under the Bolsheviks in the Soviet Union. Prior course work in either modern Germany or Russia is strongly recommended, and students may focus their research project on either country, or a comparison of both.

## Problems in British History

322c. Race, Gender, and Ethnicity in British and European Society. Spring 2012. Susan Tananbaum.
An analysis of cultural traditions in Britain and Europe. Explores the impact of immigration on Britain and the Continent, notions of cultural pluralism, and the changing definitions and implications of gender in Britain and Europe from the late eighteenth century to the present. Students undertake a major research project utilizing primary sources. (Same as Gender and Women's Studies 322.)

## Courses of Instruction

## Problems in American History

## 330c. The United States Home Front in World War II. Spring 2012. Connie Chiang.

Examines social and cultural changes on the United States home front during World War II. While some Americans remember World War II as "the good war," an examination of this period reveals a more complicated history. By analyzing a variety of historical sources-scholarly writings, government documents and propaganda, films, memoirs, fiction, and advertisinginvestigates how the war shaped and reshaped sexuality, family dynamics, and gender roles; race and ethnic relations; labor conflicts; social reform, civil rights, and citizenship; and popular culture. Also considers the war's impact on the immediate postwar years and how Americans have remembered the war. Students write a major paper based on primary source research.

332c. Community in America, in Maine, and at Bowdoin. Fall 2011 and Fall 2013. Sarah McMahon.

A research seminar that explores ideals and social, economic, political, and cultural realities of community in American history, and examines continuity, change, and socio-economic, racial, and ethnic diversity in community experience. Begins with studies of communities in seventeenth-century Massachusetts and early national upstate New York; then focuses on Maine and on Bowdoin College and its midcoast neighborhood, with readings in both the secondary literature and a wealth of primary sources.
[336c. Research in Nineteenth-Century United States History. (Same as Africana Studies 336.)]
Problems in Latin American History
[349c. The Americas as Crossroads: Transnational Histories. (Same as Environmental Studies 349 and Latin American Studies 349.)]

## [351c. The Mexican Revolution. (Same as Latin American Studies 352.)]

354c. The Maya: Challenges of Forging Community and Identity. Fall 2011. Allen Wells.
Examines the historical and contemporary Maya from pre-Columbian times to the present with special attention paid to the Maya of Guatemala and the Yucatán peninsula. Uses a variety of primary and secondary materials, including Spanish chronicles, Maya testimonies, travelers' accounts, scholarly monographs, ethnographies, and films. Topics include the importance of family, community, and spirituality; resistance and adaptation to external threat and conquest; the challenges of acculturation; and the importance of the environment in shaping material life. (Same as Latin American Studies 354.)

Prerequisite: One of the following: History 252 (same as Latin American Studies 252), 255 (same as Latin American Studies 255), 258 (same as Latin American Studies 258), 266 (same as Latin American Studies 266), or one course in Latin American studies; or permission of the instructor.

## [356c. The Cuban Revolution. (Same as Latin American Studies 356.)]

## Problems in Asian History

364c. Politics of Inequality in Modern India. Spring 2012. Rachel Sturman.
Examines how South Asians have conceptualized innate social differences (e.g., race, caste, religion, ethnicity, gender) as well as labor and poverty, and how they have put these ideas into practice during the past two centuries. Topics include histories of race, labor, sexuality, and citizenship under British imperialism and global capitalism; the emergence and vicissitudes of
the concept of minority; and modern anti-caste struggles. Following a survey of major primary sources as well as recent scholarship in the field, students pursue projects of their own design, culminating in a substantial original research paper. (Same as Asian Studies 364.)

380c. The Warrior Culture of Japan. Spring 2013. Thomas D. Conlan.
Explores the "rise" of the warrior culture of Japan. In addition to providing a better understanding of the judicial and military underpinnings of Japan's military "rule" and the nature of medieval Japanese warfare, shows how warriors have been perceived as a dominant force in Japanese history. Culminates in an extended research paper. (Same as Asian Studies 380.)

Prerequisite: Asian Studies 283 (same as History 283) or 284 (same as History 284), or permission of the instructor.
Note: This course fulfills the pre-modern requirement for history majors.

## Independent Study and Honors in History

291c-294c. Intermediate Independent Study. The Department.
401c-404c. Advanced Independent Study. The Department.
$451 \mathrm{c}-452 \mathrm{c}$. Honors Seminar. Every year. The Department.

## Interdisciplinary Majors

## Art History and Archaeology

## Requirements

1. Art History 100; one of Art History 213, 214, or 215; Art History 222; and one of Art History 302 through 388; Archaeology 101 (same as Art History 209), 102 (same as Art History 210), and any three additional archaeology courses, at least one of which must be at the 300 level.
2. Any two art history courses numbered 10 through 388.
3. One of the following: Classics 101, 211 (same as History 201), 212 (same as History 202), or 291 (Independent Study in Ancient History); Philosophy 111; or an appropriate course in religion at the 200 level.
4. Either Art History 401 or Archaeology 401.

## Art History and Visual Arts

## Requirements

1. Art History: 100; one course in African, Asian, or pre-Columbian art history numbered 103 or higher, four additional courses numbered 200 or higher; and one 300 -level seminar.
2. Visual Arts: 150, and either 180, 190, or 195; plus four other courses in the visual arts, no more than one of which may be an independent study.

## Chemical Physics

## Requirements

1. Chemistry 102 or 109, 251; Mathematics 161, 171, and 181; Physics 103, 104, 223, and 229.
2. Either Chemistry 252 or Physics 310.
3. Two courses from Chemistry 310, 340, or approved topics in 401 or 402; Physics 251, 300, 320, 357 (same as Earth and Oceanographic Science 357 and Environmental Studies 357 ), or approved topics in $401,402,451$, or 452 . At least one of these must at the 300 level or above. Other possible electives may be feasible; interested students should check with the departments.

## Computer Science and Mathematics

## Requirements

1. Computer Science 101, 210, and 231.
2. Mathematics 181, 200, and 201.
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 300-level course.
4. Two additional mathematics courses from: 204 (same as Biology 174), 224, 225, 229, 244, $258,262,264,265$, and 401.

Independent study (291) may be applied to the major upon approval of the appropriate department.

## Earth and Oceanographic Science and Physics

## Requirements

1. Chemistry 109; Earth and Oceanographic Science 101 or 102, 202 or 315, 241, 265; Mathematics 161, 171; Physics 103, 104, and 223.
2. Either Physics 257 (same as Earth and Oceanographic Science 257 and Environmental Studies 253) or 300.
3. Three additional courses, 200 -level or above, in earth and oceanographic science and/or physics.

## English and Theater

The interdisciplinary major in English and theater focuses on the dramatic arts, broadly construed, with a significant emphasis on the critical 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. Honors theses in English and theater are listed as honors in English and theater, rather than in either field individually. 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 such as the National Theater Institute or elsewhere toward the requirements for the major.

## Requirements

1. An English first-year seminar or 100 -level course.
2. One 100 -level theater course, preferably Theater 120.
3. Three theater courses from the following: 101, 130 (same as Dance 130), 145 (same as Dance 145), 150, 201, 220, 225, 240 (same as Dance 240), 250 (same as Dance 250), 260 (same as English 214), or 270.
4. One course from English 210 (same as Theater 210), 211 (same as Theater 211), or 212 (same as Theater 212); one course from English 223 (same as Theater 223) or 230 (same as Theater 230).
5. One course in modern drama, either English 246 (same as Gender and Women's Studies 262 and Theater 246), or its equivalent in another department.
6. One 300 -level course in theater, and one 300 -level English seminar.
7. One elective in English and one elective in theater or dance at the 200 level or higher.

## Eurasian and East European Studies

The interdisciplinary major in Eurasian and East European studies 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 Eurasian and East European studies (EEES) major allows students to focus their study on one cultural, social, political or historical topic, illuminating the interrelated linkages of these countries.

In the past, students studying Russian have had double majors in the above disciplines. This major combines these 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 101, 102, 203, 204), 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 200 level and one at the 300 level or above. 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 200 and one at the 300 level, or above. 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 at 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 204
A. Concentration in Russian/East European Politics, Economics, History, Sociology, and Anthropology.

Core courses:
Economics 221b - MCSR, ESD. Marxian Political Economy
Gender and Women's Studies 218b - IP. Sex and Socialism: Gender and Political Ideologies of the Twentieth Century
[Government 230b. Post-Communist Russian Politics and Society]
[Government 324b. Post-Communist Pathways]
History 218c - ESD, IP. The History of Russia, 1725-1924
History 219c - ESD, IP. Russia's Twentieth Century: Revolution and Beyond
History 311c. Experiments in Totalitarianism: Nazi Germany and Soviet Russia
B. Complementary courses in Eurasian and East European Literature and Culture:

German 151c - ESD. The Literary Imagination and the Holocaust
German 317c - IP. German Literature and Culture since 1945
Music 273c. Chorus (when content applies)
Russian 22c. "It Happens Rarely, Maybe, but It Does Happen"-Fantasy and Satire in East Central Europe

Russian 220c - IP. Nineteenth-Century Russian Literature
Russian 221c - IP, VPA. Soviet Worker Bees, Revolution, and Red Love in Russian Film (same as Gender and Women's Studies 220)

Russian 223c. Dostoevsky and the Novel (same as Gender and Women's Studies 221)
Russian 224c. Dostoevsky or Tolstoy (same as Gender and Women's Studies 217)
Russian 251c - IP, VPA. Russia's "Others": North Caucasus, Siberia, and Central Asia through Film and Literature (same as Gender and Women's Studies 243)

Courses in Russian:

Russian 307c. Russian Folk Culture<br>Russian 309c. Nineteenth-Century Russian Literature<br>Russian 310c. Modern Russian Literature<br>Russian 316c. Russian Poetry

Mathematics and Economics

## Requirements

1. Six courses in mathematics as follows: Mathematics 181, 201, 225, 265; and two of Mathematics 224, 229, 264, 304.
2. Either Computer Science 210 or Mathematics 235, 244, or 305.
3. Four courses in economics with a grade of C- or better, as follows: Economics 255, 256, 316 , and one other 300 -level course.

## Interdisciplinary Studies

220. Leaders and Leadership. Spring 2012. Angus S. King.

A study of the concept, principles, practice, and significance of leadership. Content is presented through case studies intended to illustrate and illuminate various characteristics of leaders and their constituencies. Abraham Lincoln, Eleanor Roosevelt, Winston Churchill, Joshua Chamberlain, Margaret Thatcher, Martin Luther King, and Ernest Shackleton are among those studied. "An army of deer led by a lion is more to be feared than an army of lions led by a deer."

## Latin American Studies

Krista E. Van Vleet, Program Director<br>TBA, Program Coordinator

Contributing Faculty: Nadia V. Celis, Mariana M. Cruz, Elena M. Cueto-Asín, Julián P. Díaz, Gustavo Faverón-Patriau, Lori Flores, Matthew Klingle†, Stephen J. Meardon†, Michael Birenbaum Quintero, Esmeralda A. Ulloa, Krista E. Van Vleet, 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 in Latin American studies consists of nine courses, including:

1. One course, offering a survey of cultural production in Latin America, conducted in one of the languages spoken in the region other than English. Students may choose:

Latin American Studies 206, Francophone Cultures (same as Africana Studies 207 and French 207); or

Latin American Studies 209, Introduction to Hispanic Studies: Poetry and Theater (same as Spanish 209); or

Latin American Studies 210, Introduction to Hispanic Studies: Essay and Narrative (same as Spanish 210); or
a comparable course from off-campus study that surveys Latin American cultural production (literature, art, music, mass media, etc.) 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 252, Colonial Latin America (same as History 252); Latin American Studies 255, Modern Latin America (same as History 255); or Latin American Studies 258, Latin American Revolutions (same as History 258).
3. A 200 -level course in the social sciences that focuses on Latin America such as Latin American Studies 235, The Economy of Latin America (same as Economics 225); Latin American Studies 237, Gender and Family in Latin America (same as Anthropology 237 and Gender and Women's Studies 237); Latin American Studies 238, Culture and Power in the Andes (same as Anthropology 238).
4. A concentration of four additional courses centered on a particular theme (e.g., social movements) or geographic region, selected by each major in consultation with a faculty advisor in Latin American studies. The courses for the concentration should be at the 200 or 300 level.
5. An elective course in Latin American studies, outside the student's concentration.
6. A 300-level course 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 on a graded basis (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 204 (or another appropriate language); Latin American Studies 255, Modern Latin America (same as History 255); 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 of a written prospectus of the project by the director of Latin American studies. A maximum of two 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 minor must be taken on a graded basis (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 in program course offerings and present clearly articulated proposals for scholarly research. Students must prepare and defend an honors thesis before a program faculty committee.

## Introductory, Intermediate, and Advanced Courses

[130c - IP. Introduction to the Arts of Ancient Mexico and Peru. (Same as Art History 130.)]
[136c - IP, VPA. Black Musics in Latin America and the Caribbean. (Same as Africana Studies 136 and Music 136.)]

137c - ESD, VPA. CuBop, Up-Rock, Boogaloo, and Banda: Latinos Making Music in the United States. Fall 2011. Michael Birenbaum Quintero.

Surveys the musical styles of Latinos in the United States. Discusses the role of these musics in articulating race, class, gender, and sexual identities for U.S. Latinos, their circulation along migration routes, their role in identity politics and ethnic marketing, their commercial crossover to Anglo audiences, and Latin/o contributions to jazz, funk, doo-wop, disco, and hip-hop. Case studies may include Mexican-American/Chicano, Puerto Rican/Nuyorican, and CubanAmerican musics; Latin music in golden age Hollywood; Latin dance crazes from mambo to the Macarena; rock en español; the early 2000s boom of Latin artists like Shakira, Enrique Iglesias, and Jennifer Lopez; reggaetón, race politics, and the creation of the "Hurban" market; and the transnational Latin music industries of Los Angeles, New York, and Miami. (Same as Music 137.)

205c. Advanced Spanish. Every semester. Fall 2011. Nadia Celis, Elena Cueto-Asín, and Enrique Yepes. Spring 2011. Carolyn Wolfenzon.

The study of a variety of texts and media, together with an advanced grammar review, designed to increase written and oral proficiency, as well as appreciation of the cultural history of the Spanish-speaking world. Foundational course for the major. Three class hours per week and one weekly conversation session with assistant. (Same as Spanish 205.)

Prerequisite: Spanish 204 or placement.
206c - ESD, IP. Francophone Cultures. Every fall. Fall 2011. Isabelle Choquet.
An introduction to the cultures of various French-speaking regions outside of France. Examines the history, politics, customs, cinema, literature, and the arts of the Francophone world, principally Africa and the Caribbean. Conducted in French. (Same as Africana Studies 207 and French 207.)

Prerequisite: French 205 or higher, or permission of the instructor.
209c - IP. Introduction to Hispanic Studies: Poetry and Theater. Every semester. Fall 2011. Gustavo Faverón-Patriau. Spring 2012. Gustavo Faverón-Patriau and Enrique Yepes.

A chronological introduction to the cultural production of the Spanish-speaking world from pre-Columbian times to the present, with particular emphasis on the analysis of poetry and theater. Examines major literary works and movements in their historical and cultural context. One weekly workshop with assistant in addition to class time. Conducted in Spanish. (Same as Spanish 209.)

Prerequisite: Spanish 205 (same as Latin American Studies 205) or permission of the instructor.

## Courses of Instruction

210c - IP. Introduction to Hispanic Studies: Essay and Narrative. Every semester. Fall 2011. Esmeralda Ulloa. Spring 2012. Nadia Celis and Elena Cueto-Asín.

A chronological introduction to the cultural production of the Spanish-speaking world from pre-Columbian times to the present, with particular emphasis on the analysis of essay and narrative. Examines major literary works and movements in their historical and cultural context. (Same as Spanish 210.)

Prerequisite: Spanish 205 (same as Latin American Studies 205) or permission of the instructor.

213c - ESD, IP. Introduction to the Study and Criticism of Francophone Literature. Every spring. Hanétha Vété-Congolo.

Introduces students to the literary tradition of the contemporary Francophone world. Focuses on major authors and literary movements in historical and cultural context. Conducted in French. (Same as Africana Studies 209 and French 211.)

Prerequisite: French 205 or higher, or permission of the instructor.
[216b - ESD. Food, Culture, and Society. (Same as Sociology 216.)]
[223b - ESD. Transnational Cosmologies: Andean Examples. (Same as Anthropology 224.)]
[226b - IP. Political Economy of Pan-Americanism. (Same as Economics 226.)]
[229b. Maya Archaeology and Ethnohistory. (Same as Anthropology 229.)]
230c. Latinos and Latinas in the United States: Migration, Education, and Community Development. Spring 2012. Mariana Cruz.

Explores the experiences of Latino/as, the fastest growing minority group in the United States, from a critical lens that centers three important themes: identity, education, and politics. Questions explored include: Who are the "Latino/as" in the United States? What are the differences between Hispanics, Latino/as, Latin Americans, and Chicano/as? What are the experiences of Latino/as in United States schools? How might educators, activists, and policymakers engage these questions in order to better understand and serve Latino/as a whole? Includes a service-learning and action-research component. (Same as Education 230.)

235b - IP. The Economy of Latin America. Fall 2012 or Spring 2013. Julián P. Díaz.
Analyzes selected economic issues of Latin America in the twentieth century and into the twenty-first century. Issues covered include the Import Substitution Industrialization strategy, the Debt Crisis of the 1980s, stabilization programs, trade liberalization and economic integration, inflation and hyperinflation in the region, poverty and inequality, and the Washington Consensus and the rise of populism. Important economic episodes of the past three decades such as the Mexican Crisis of 1994-1995, the Chilean Economic Miracle, dollarization in Ecuador, and the recent crisis in Argentina will also be examined. (Same as Economics 225.)

Prerequisite: Economics 101 and 102.
[236c - ESD. Borderlands and Empires in Early North America. (Same as
Environmental Studies 235 and History 235.)]
[237b - ESD, IP. Family, Gender, and Sexuality in Latin America. (Same as Anthropology 237 and Gender and Women's Studies 237.)]

238b - IP. Culture and Power in the Andes. Fall 2011. Krista Van Vleet.
Explores the anthropology and history of the Andes, focusing on questions of cultural transformation and continuity among Native Andeans. Examines ethnography, popular culture, and current events of Bolivia, Ecuador, and Peru. Topics include the Inca state and Spanish colonization; Native Andean family and community life; subsistence economies; gender, class, and ethnic inequalities and social movements; domestic and state violence; religion; tourism; coca and cocaine production; and migration. (Same as Anthropology 238.)

Prerequisite: Anthropology 101 or permission of the instructor.
[252c - IP. Colonial Latin America. (Same as History 252.)]
253c. The United States and Latin America: Tempestuous Neighbors. Spring 2012. Allen Wells.

Seminar. Examines scholarship on the evolution of United States-Latin American relations since Independence. Topics include the Monroe Doctrine; commercial relations; interventionism; Pan Americanism; immigration; and revolutionary movements during the Cold War. (Same as History 253.)
[254c. Contemporary Argentina. (Same as History 254.)]
255c - IP. Modern Latin America. Fall 2011. Allen Wells.
Traces the principal economic, social, and political transformations from the wars of independence to the present. Topics include colonial legacies and the aftermath of independence; the consolidation of nation-states and their insertion in the world economy; the evolution of land and labor systems, and the politics of reform and revolution, and the emergence of social movements. (Same as History 255.)
[257b - ESD, IP. Gender and Sexuality in Latin America. (Same as Anthropology 254, Gender and Women's Studies 254, and Sociology 254.)]
258c - IP. Latin American Revolutions. Spring 2012. Allen Wells.
Examines revolutionary change in Latin America from a historical perspective, concentrating on four cases of attempted revolutionary change-Cuba, Chile, Nicaragua, and Guatemala. Popular images and orthodox interpretations are challenged and new propositions about these processes are tested. External and internal dimensions of each of these social movements are analyzed and each revolution is discussed in the full context of the country's historical development. (Same as History 258.)

260c - ESD. Labor, Gender, and Immigration in the United States-Mexico Borderlands. Spring 2012. Lori Flores.

Seminar. Explores the history of the United States-Mexico borderlands through the prisms of work, gender, and movements of people. What is the definition of a "borderland" and who or what creates one, physical or imagined? What historical moments and patterns make the United States-Mexico borderlands a unique space, and how has this space shifted and changed over time? Through readings students will analyze how labor and class, articulations and notions of gender, and immigration policies and migrant flows have impacted processes of identity formation, inclusion, and exclusion for this region's racially and ethnically diverse communities. A critical understanding of place, relations of power, historical memory, and the meanings of transnationalism are major objectives. (Same as Gender and Women's Studies 258 and History 260.)
[266c - IP. History of Mexico. (Same as History 266.)]

## 273c - ESD. The History of Latinos in the United States. Fall 2011. Lori Flores.

A survey of the social, political, and cultural history of Latinos, the fastest-growing population in the United States, from 1848 to the present. Readings and films focus on the experiences of Mexican American, Puerto Rican, Dominican, Cuban, and Central American communities as separate groups and living among each other. Key course topics include legacies of conquest; past and present immigration; inclusion and exclusion; labor movements and activism; articulations of race, gender, and citizenship in urban and rural settings; transnationalism; the development of Latino politics; border violence; and Latino futurism. Aims to both show the particularities of the Latino experience in the United States and position Latinos as integral figures to more inclusive and revised narratives of the nation's past. (Same as History 273.)
[302c. The Idea of Latin America. (Same as Spanish 302.)]
[303c. Conquest and Resistance in Latin America. (Same as Spanish 303.)]
304c. Dress and Body Politics in Latin America. Spring 2012. Esmeralda Ulloa.
Examines the significant tole of the dressed body (both attire and the body itself) in the configuration of political discourse and national identity in Latin America. Focuses on verbal and visual representations of iconic figures such as Simón Bolívar, Pancho Villa, Rigoberta Menchú, and Evo Morales, among others. The connection of these often contradictory images to governance and collective identities explored in various contexts from the colonial period to the present. Conducted in Spanish. (Same as Spanish 304.)
Prerequisite: Spanish 209 (same as Latin American Studies 209) or 210 (same as Latin American Studies 210).

318c. A Journey around Macondo: García Márquez and His Contemporaries. Spring 2012. Nadia Celis.

Studies the main topics, techniques, and contributions of Colombian Nobel Prize winner Gabriel García Márquez as presented in One Hundred Years of Solitude. Explores the actual locations, social, and cultural trends that inspired the creation of Macondo, the so-called "village of the world" where the novel takes place, and the universal themes to which this imaginary town relates. His work is read in connection with other contemporary writers who were part of the intellectual climate in which the novel was written, such as José Félix Fuenmayor, Álvaro Cepeda Samudio, and Héctor Rojas Herazo. (Same as Spanish 318.)

Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.

320c. Beyond the Postcard: The Hispanic Caribbean. Fall 2011. Nadia Celis.
Explores the historical trends that have shaped Hispanic Caribbean societies through a panoramic study of twentieth-century fiction, film, and popular music by authors from the Greater Caribbean and U.S.-Latinos of Caribbean descent. Topics include colonialism, slavery and the plantation economy, imperialism, dictatorships, tourism, migrations, and collective identities. Authors include García Márquez, Santos-Febres, Barnet, Piñera, and Junot Díaz (Same as Africana Studies 320 and Spanish 320.)

Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.
[332c. Poetry and Social Activism in Latin America. (Same as Spanish 332.)]

337c. Hispanic Short Story. Fall 2011. Gustavo Faverón-Patriau.
An investigation of the short story as a literary genre, beginning in the nineteenth century, involving discussion of its aesthetics, as well as its political, social, and cultural ramifications in the Spanish-speaking world. Authors include Pardo Bazán, Echevarría, Borges, Cortázar, García Márquez, Ferré, and others. (Same as Spanish 337.)

Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.
[339c. Borges and the Borgesian. (Same as Spanish 339.)]
[341c. Colonial Experience and Post-colonial Perspectives. (Same as Spanish 341.)]
[343c. Imaginary Cities/Real Cities in Latin America. (Same as Spanish 343.)]
345c. Ecological Thought in Latin American Literature. Fall 2011. Enrique Yepes.
Explores how the radical interconnectedness postulated by ecological thinking can be read in Latin American narrative, essay, film, and poetry from the 1920 s to the present. Includes a review of cultural ecology as well as an overview of environmental history and activism in the region. (Same as Environmental Studies 285 and Spanish 345.)
Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.
[348c. The Others: The Nineteenth-Century Latin American Novel. (Same as Spanish 348.)]
[349c. The Americas as Crossroads: Transnational Histories. (Same as Environmental Studies 349 and History 349.)]
[352c. The Mexican Revolution. (Same as History 351.)]
354c. The Maya: Challenges of Forging Community and Identity. Fall 2011. Allen Wells.
Examines the historical and contemporary Maya from pre-Columbian times to the present with special attention paid to the Maya of Guatemala and the Yucatán peninsula. Uses a variety of primary and secondary materials, including Spanish chronicles, Maya testimonies, travelers' accounts, scholarly monographs, ethnographies, and films. Topics include the importance of family, community, and spirituality; resistance and adaptation to external threat and conquest; the challenges of acculturation; and the importance of the environment in shaping material life. (Same as History 354.)
Prerequisite: One of the following: History 252 (same as Latin American Studies 252), 255 (same as Latin American Studies 255), 258 (same as Latin American Studies 258), 266 (same as Latin American Studies 266), or one course in Latin American studies; or permission of the instructor.
[356c. The Cuban Revolution. (Same as History 356.)]
401c-402c. Advanced Independent Study in Latin American Studies. The Program.

# Mathematics 

William Barker, Department Cbair
Suzanne M. Theberge, Senior Department Coordinator

Professors: William Barker, Adam B. Levy, Rosemary A. Roberts, Mary Lou Zeeman
Associate Professors: Thomas Pietraho**, Jennifer Taback
Assistant Professor: Manuel Reyes
Visiting Faculty: Michael King, Mohammad Tajdari
Lecturers: Eric Gaze, Bradley Hartlaub, Leon Harkleroad
Fellows: Aba Mbirika, Rajarshi Saha

## Requirements for the Major in Mathematics

A major consists of at least eight courses numbered $\mathbf{2 0 0}$ or higher, including Mathematics 200 and 201 (or their equivalents), and a course numbered in the 300 s. Students who have already mastered the material in Mathematics $\mathbf{2 0 0}$ or $\mathbf{2 0 1}$ may substitute a more advanced course after receiving approval from the department chair. Courses must be passed with a Cor better (including CR [Credit]) to count toward the major.

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 a 300 -level course is meant to ensure that all majors have sufficient experience in at least one specific area of mathematics. Those areas are algebra (Mathematics 201, 262, and 302); analysis (Mathematics 233, 263, and 303); applied mathematics (Mathematics 224, 264, and 304); probability and statistics (Mathematics 225, 265, and 305); and geometry (Mathematics 247 and 307).

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 four courses numbered 200 or higher. Courses must be passed with a C- or better (including CR [Credit]) to count toward the minor.

## Interdisciplinary Majors

The department participates in two interdisciplinary joint majors: computer science and mathematics, and mathematics and economics. See pages 198 and 200.

## Recommended Courses

Listed below are some of the courses recommended to students with the indicated interests.
For secondary school teaching:
Computer Science 101; Mathematics 201, 225, 232, 247, 258, 262, 263, 265.
For graduate study:
Mathematics $200,201,233,262,263$, and at least two courses numbered in the 300 s.
For engineering and applied mathematics:
Mathematics 201, 204 (same as Biology 174), 224, 225, 233, 244, 253, 258, 264, 265, 304.
For mathematical economics and econometrics:
Mathematics 201, 225, 229, 244, 263, 265, 304, 305, and Economics 316.
For statistics:
Mathematics 201, 224, 225, 235, 244, 265, 305.

## For computer science:

Computer Science 231, 289; Mathematics 200, 201, 225, 229, 244, 258, $262,265$.
For operations research and management science:
Mathematics 200, 201, 225, 229, 258, 265, 305, and Economics 316.

## Introductory, Intermediate, and Advanced Courses

## 50 - MCSR. Quantitative Reasoning. Every semester. Eric Gaze.

Explores the ways and means by which we communicate with numbers; the everyday math we encounter on a regular basis. The fundamental quantitative skill set is covered in depth providing a firm foundation for further coursework in mathematics and the sciences. Topics include ratios, rates, percentages, units, descriptive statistics, linear and exponential modeling, correlation, logic, probability. A project-based course using Microsoft Excel, emphasizing conceptual understanding and application. Reading of current newspaper articles and exercises involving personal finance are incorporated to place the mathematics in real-world context.

155a - MCSR. Introduction to Statistics and Data Analysis. Every fall. Rosemary Roberts.
A general introduction to statistics in which students learn to draw conclusions from data using statistical techniques. Examples are drawn from many different areas of application. The computer is used extensively. Topics include exploratory data analysis, planning and design of experiments, probability, one and two sample t-procedures, and simple linear regression. Not open to students who have credit for Mathematics 165, Psychology 252, or Economics 257.

161a - MCSR. Differential Calculus. Every semester. The Department.
Functions, including the trigonometric, exponential, and logarithmic functions; the derivative and the rules for differentiation; the anti-derivative; applications of the derivative and the antiderivative. Four to five hours of class meetings and computer laboratory sessions per week, on average. Open to students who have taken at least three years of mathematics in secondary school.

## Courses of Instruction

165a - MCSR. Biostatistics. Every spring. Leon Harkleroad.
An introduction to the statistical methods used in the life sciences. Emphasizes conceptual understanding and includes topics from exploratory data analysis, the planning and design of experiments, probability, and statistical inference. One and two sample t-procedures and their non-parametric analogs, one-way ANOVA, simple linear regression, goodness of fit tests, and the chi-square test for independence are discussed. An average of four to five hours of class meetings and computer laboratory sessions per week. Not open to students who have credit for or are concurrently enrolled in Mathematics 155, Psychology 252, or Economics 257.

171a - MCSR. Integral Calculus. Every semester. The Department.
The definite integral; the Fundamental theorems; improper integrals; applications of the definite integral; differential equations; and approximations including Taylor polynomials and Fourier series. An average of four to five hours of class meetings and computer laboratory sessions per week.

## Prerequisite: Mathematics 161.

172a - MCSR. Integral Calculus, Advanced Section. Every semester. The Department.
A review of the exponential and logarithmic functions, techniques of integration, and numerical integration. Improper integrals. Approximations using Taylor polynomials and infinite series. Emphasis on differential equation models and their solutions. An average of four to five hours of class meetings and computer laboratory sessions per week. Open to students whose backgrounds include the equivalent of Mathematics 161 and the first half of Mathematics 171. Designed for first-year students who have completed an AB Advanced Placement calculus course in their secondary schools.

181a - MCSR. Multivariate Calculus. Every semester. The Department.
Multivariate calculus in two and three dimensions. Vectors and curves in two and three dimensions; partial and directional derivatives; the gradient; the chain rule in higher dimensions; double and triple integration; polar, cylindrical, and spherical coordinates; line integration; conservative vector fields; and Green's theorem. An average of four to five hours of class meetings and computer laboratory sessions per week.

## Prerequisite: Mathematics 171 or 172.

200a - MCSR. Introduction to Mathematical Reasoning. Every semester. Fall 2011. Thomas Pietraho. Spring 2012. The Department.

An introduction to logical deductive reasoning and mathematical proof through diverse topics in higher mathematics. Specific topics include set and function theory, modular arithmetic, proof by induction, and the cardinality of infinite sets. May also consider additional topics such as graph theory, number theory, and finite state automata.
Prerequisite: Mathematics 181 or permission of the instructor.
201a - MCSR. Linear Algebra. Every semester. Fall 2011. Manuel Reyes. Spring 2012. The Department.

Topics include vectors, matrices, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors, and quadratic forms. Applications to linear equations, discrete dynamical systems, Markov chains, least-squares approximation, and Fourier series.

Prerequisite: Mathematics $\mathbf{1 8 1}$ or permission of the instructor.

204a - MCSR. Biomathematics. Every fall. Fall 2011. Mary Lou Zeeman.
A study of mathematical methods driven by questions in biology. Biological questions are drawn from a broad range of topics, including disease, ecology, genetics, population dynamics, neurobiology, endocrinology, and biomechanics. Mathematical methods include compartmental models, matrices, linear transformations, eigenvalues, eigenvectors, matrix iteration, and simulation; ODE models and simulation, stability analysis, attractors, oscillations and limiting behavior, mathematical consequences of feedback, and multiple time-scales. Three hours of class meetings and two hours of computer laboratory sessions per week. Within the biology major, this course may count as the mathematics credit or as biology credit, but not both. Students are expected to have taken a year of high school or college biology prior to taking this course. (Same as Biology 174.)

Prerequisite: Mathematics 161 or higher, or permission of the instructor.
224a - MCSR. Applied Mathematics: Ordinary Differential Equations. Every spring. Spring 2012. The Department.

A study of some of the ordinary differential equations that model a variety of systems in the natural and social sciences. Classical methods for solving differential equations with an emphasis on modern, qualitative techniques for studying the behavior of solutions to differential equations. Applications to the analysis of a broad set of topics, including population dynamics, competitive economic markets, and design flaws. Computer software is used as an important tool, but no prior programming background is assumed.

Prerequisite: Mathematics 181 or permission of the instructor.
225a - MCSR. Probability. Every fall. Fall 2011. William Barker.
A study of the mathematical models used to formalize nondeterministic or "chance" phenomena. General topics include combinatorial models, probability spaces, conditional probability, discrete and continuous random variables, independence and expected values. Specific probability densities, such as the binomial, Poisson, exponential, and normal, are discussed in depth.

Prerequisite: Mathematics $\mathbf{1 8 1}$ or permission of the instructor.
227a - MCSR. Elementary Topics in Topology. Every other spring. Spring 2012. The Department.

Topology studies properties of geometric objects that do not change when the object is deformed. The course covers knot theory, surfaces, and other elementary areas of topology.

Prerequisite: Mathematics $\mathbf{2 0 0}$ or permission of the instructor.
229a - MCSR. Optimization. Every other year. Fall 2011. Adam Levy.
A study of optimization problems arising in a variety of situations in the social and natural sciences. Analytic and numerical methods are used to study problems in mathematical programming, including linear models, but with an emphasis on modern nonlinear models. Issues of duality and sensitivity to data perturbations are covered, and there are extensive applications to real-world problems.
Prerequisite: Mathematics 181 or permission of the instructor.
232a - MCSR. Number Theory. Every other fall. Fall 2012. The Department.
A standard course in elementary number theory, which traces the historical development and includes the major contributions of Euclid, Fermat, Euler, Gauss, and Dirichlet. Prime

## Courses of Instruction

numbers, factorization, and number-theoretic functions. Perfect numbers and Mersenne primes. Fermat's theorem and its consequences. Congruences and the law of quadratic reciprocity. The problem of unique factorization in various number systems. Integer solutions to algebraic equations. Primes in arithmetic progressions. An effort is made to collect along the way a list of unsolved problems.

Prerequisite: Mathematics 200 or permission of the instructor.
233a - MCSR. Functions of a Complex Variable. Every other fall. Fall 2011. Michael King.
The differential and integral calculus of functions of a complex variable. Cauchy's theorem and Cauchy's integral formula, power series, singularities, Taylor's theorem, Laurent's theorem, the residue calculus, harmonic functions, and conformal mapping.

Prerequisite: Mathematics 181 or permission of the instructor.
244a - MCSR. Numerical Methods. Every other spring. Spring 2012. The Department.
An introduction to the theory and application of numerical analysis. Topics include approximation theory, numerical integration and differentiation, iterative methods for solving equations, and numerical analysis of differential equations.

Prerequisite: Mathematics 201 or permission of the instructor.
247a - MCSR. Geometry. Every other spring. Spring 2013. William Barker.
A survey of modern approaches to Euclidean geometry in two and three dimensions. Axiomatic foundations of metric geometry. Transformational geometry: isometries and similarities. Klein's Erlangen Program. Symmetric figures. Scaling, measurement, and dimension.

Prerequisite: Mathematics $\mathbf{2 0 0}$ or permission of the instructor.
252a - MCSR. Mathematical Cryptography. Spring 2014. Jennifer Taback.
Classical and modern methods of cryptography and cryptanalysis. Topics include public key cryptography and the RSA encryption algorithm, factoring techniques, and recently proposed cryptosystems based on group theory and graph theory.
Prerequisite: Mathematics $\mathbf{2 0 0}$ or permission of the instructor.
253a - MCSR. Vector Calculus. Fall 2012. William Barker.
A study of the fundamental concepts of vector calculus based on linear algebra. Topics include the derivative as best affine approximation; higher order derivatives and Taylor approximations; multiple integration and change of variables; vector fields, curl, and divergence; line and surface integration; the integral theorems of Green, Gauss, and Stokes; conservative vector fields; differential forms and the generalized Stokes' theorem; applications in the physical sciences and economics.

## Prerequisite: Mathematics 201.

258a - MCSR. Combinatorics and Graph Theory. Every other spring. Spring 2013. Aba Mbirika.

An introduction to combinatorics and graph theory. Topics to be covered may include enumeration, matching theory, generating functions, partially ordered sets, Latin squares, designs, and graph algorithms.

Prerequisite: Mathematics $\mathbf{2 0 0}$ or permission of the instructor.

262a - MCSR. Introduction to Algebraic Structures. Every year. Fall 2011. Jennifer Taback.
An introduction to the theory of finite and infinite groups, with examples ranging from symmetry groups to groups of polynomials and matrices. Properties of mappings that preserve algebraic structures are studied. Topics include cyclic groups, homomorphisms and isomorphisms, normal subgroups, factor groups, the structure of finite abelian groups, and Sylow theorems.

Prerequisite: Mathematics 200 and 201 or permission of the instructor.
263a - MCSR. Introduction to Analysis. Every year. Spring 2012. The Department.
Building on the theoretical underpinnings of calculus, develops the rudiments of mathematical analysis. Concepts such as limits and convergence from calculus are made rigorous and extended to other contexts, such spaces of functions. Specific topics include metric spaces, point-set topology, sequences and series, continuity, differentiability, the theory of Riemann integration, and functional approximation and convergence.

Prerequisite: Mathematics 200 or a 200 -level mathematics course approved by the instructor.
264a - MCSR. Applied Mathematics: Partial Differential Equations. Every other year. Spring 2012. Adam Levy.

A study of some of the partial differential equations that model a variety of systems in the natural and social sciences. Classical methods for solving partial differential equations, with an emphasis where appropriate on modern, qualitative techniques for studying the behavior of solutions. Applications to the analysis of a broad set of topics, including air quality, traffic flow, and imaging. Computer software is used as an important tool, but no prior programming background is assumed.

Prerequisite: Mathematics 201 and 224, or permission of the instructor.
265a - MCSR. Statistics. Every spring. Spring 2012. Rosemary Roberts.
An introduction to the fundamentals of mathematical statistics. General topics include likelihood methods, point and interval estimation, and tests of significance. Applications include inference about binomial, Poisson, and exponential models, frequency data, and analysis of normal measurements.

Prerequisite: Mathematics 225 or permission of the instructor.
291a-294a. Intermediate Independent Study in Mathematics. The Department.
302a. Advanced Topics in Algebra. Every other spring. Spring 2012. The Department.
Introduction to rings and fields. Vector spaces over arbitrary fields. Additional topics may include Galois theory, algebraic number theory, finite fields, and symmetric functions.

Prerequisite: Mathematics 262 or permission of the instructor.
303a. Advanced Topics in Analysis. Every other spring. Spring 2013. Thomas Pietraho.
One or more selected topics from advanced analysis. Possible topics include Lebesque measure and integration theory, Fourier analysis, Hilbert and Banach space theory, and stochastic calculus with applications to mathematical finance.
Prerequisite: Mathematics 201 and 263, or permission of the instructor.

## Courses of Instruction

304a. Advanced Topics in Applied Mathematics. Every other fall. Fall 2012. The Department.
One or more selected topics in applied mathematics. Material selected from the following: Fourier series, partial differential equations, integral equations, optimal control, bifurcation theory, asymptotic analysis, applied functional analysis, and topics in mathematical physics.

Prerequisite: Mathematics 200, 201, and 224, or permission of the instructor.
305a. Advanced Topics in Probability and Statistics. Every other fall. Fall 2011. Bradley Hartlaub.

One or more specialized topics in probability and statistics. Possible topics include regression analysis, nonparametric statistics, logistic regression, and other linear and nonlinear approaches to modeling data. Emphasis is on the mathematical derivation of the statistical procedures and on the application of the statistical theory to real-life problems.

Prerequisite: Mathematics 201 and 265, or permission of the instructor.
307a. Advanced Topics in Geometry. Every other fall. Fall 2011. William Barker.
A survey of affine, projective, and non-Euclidean geometries in two-dimensions, unified by the transformational viewpoint of Klein's Erlanger Programm. Special focus will be placed on conic sections and projective embeddings. Additional topics as time permits: complex numbers in plane geometry, quaternions in three-dimensional geometry, and the geometry of fourdimensional space-time in special relativity. Mathematics 247 is helpful but not required.

Prerequisite: Mathematics 200 and 201 or permission of the instructor.
401a-404a. Advanced Independent Study and Honors in Mathematics. The Department.

## Music

Robert K. Greenlee, Department Cbair
Linda Marquis, Senior Department Coordinator
Professors: Robert K. Greenlee, Mary Hunter, Cristle Collins Judd
Associate Professors: James W. McCalla*, Vineet Shende
Assistant Professor: Michael Birenbaum Quintero
Senior Lecturer: Anthony F. Antolini
Lecturers: Stephen Grover, Frank Mauceri†, John Morneau, Roland Vazquez, Christopher Watkinson
Visiting Faculty: George Lopez

## Requirements for the Major in Music

The music major normally consists of ten academic courses and two performance credits. Most majors follow one of the tracks indicated in the "Sample Majors" listed below, but students are also invited to design a major to suit their own needs. No more than two 100 -level courses in addition to Music 101, 131, and 151 may be counted toward the major, and two 300 -level courses in addition to Music 451 are normally required of all majors. Honors work normally adds one extra course to the standard ten, and its second semester counts as the senior independent study. Only one academic course for which the grade of CR (Credit) is earned may count towards 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 a list of courses that fulfill the major, or identifies a sample major to follow by submitting a list or sample major announcement to the music department chair or to another member of the department. (3) Upon departmental approval of the list of courses or the particular track, 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.

## Sample Sequences of Courses for the Music Major

General Music Major
Music 101, 131 or 211, 151, 203, 302, and 451.
Four electives, including two 200 -level courses and one 300 -level course. One consecutive year of lessons on the same instrument; one consecutive year in the same ensemble. Honors in music adds one advanced independent study to this list.

## Music and Culture

Music 101 or 151, 131, 211; a total of five electives: two or three from the music department (including at least one at the 200 level); and two or three relevant and sequential courses from another department, including at least one at the 200 level; a 200 -level independent study combining departmental and extra-departmental perspectives; one course numbered 355-358, and 451; and one full credit of a non-Western ensemble.

## Composition and Theory

Music 101, 151, 203, 218 or 291, 243, one course numbered 250-259, 302, 361, 451, and one elective, plus the lessons and ensemble required for the general major, above.

## European and American Music

Music 101, 131, 151, 203, one course numbered 250-259, 302, one course numbered 351-354, two electives (including at least one at the 200 level), 451 ; plus the lessons and ensemble required for the general major, above.

## Requirements for the Minor in Music

The minor in music consists of six credits (five academic courses and one consecutive year of lessons for credit or one year of participation in a single ensemble). The five academic courses include 101 and any four others including at least two above the 100 level. Only one academic course for which the grade of CR (Credit) is earned may count towards the minor.

## Introductory, Intermediate, and Advanced Courses

61c - VPA. Fundamentals of Music. Every year. Spring 2012. Mary Hunter.
For the entry-level student. Explores the fundamental elements of music-form, harmony, melody, pitch, rhythm, texture, timbre-and teaches basic skills in reading and writing Western music notation for the purposes of reading, analyzing, and creating musical works.

71a - INS, VPA. Bird Song, Human Song. Spring 2012. Robert Greenlee and Nathaniel Wheelwright.

A study of avian and human melodies, including the mechanics, anatomy, neurobiology, and endocrinology of sound production and recognition in birds and humans; ecological and evolutionary contexts of song; and interspecific influences on songs. Songs and calls, identified

## Courses of Instruction

aurally and through sonograms and basic music notation, are used to inspire new musical compositions that explore the musical relationships between humans and birds. Required field trips, research projects, and anatomy laboratories. Although no music or biology experience is required or presumed, students should have a strong interest in learning about birds and music. (Same as Biology 71 and Environmental Studies 71.)

101c - VPA. Theory I: Fundamentals of Music Theory. Every year. Fall 2011. Robert Greenlee.

Designed for students with some beginning experience in music theory and an ability to read music. Covers scales, keys, modes, intervals, and basic tonal harmony.

Prerequisite: Music 61, placement, or permission of the instructor.
102c - VPA. Introduction to Classical Music. Fall 2011. Mary Hunter.
Introduction to some major works and central issues in the canon of Western music, from the middle ages up to the present day. Includes some concert attendance and in-class demonstrations.

105c - VPA. Introduction to Audio Recording Techniques. Every year. Spring 2012. Christopher Watkinson.

Explores the history of audio recording technology as it pertains to music, aesthetic function of recording technique, modern applications of multitrack recording, and digital editing of sound created and captured in the acoustic arena. Topics include the physics of sound, microphone design and function, audio mixing console topology, dynamic and modulation audio processors, studio design and construction, principles of analog to digital (ADA) conversion, and artistic choice as an engineer. Students will create their own mix of music recorded during class time.

Music 120 through 149 cover specific aspects of music history and literature, designed for students with little or no background in music. Course titles and contents may change every semester.

130c. History of Rock Music. Spring 2012. Vineet Shende.
Explores how a marginalized and racially segregated genre (the so called "Race Music" of the 1920s) has developed into the world's most dominant popular music tradition. The history of rock music and its descendants (including punk, metal, funk, electronica, and hip-hop) will be explored through changes in five often interrelated filters: race relations, commerce, politics, technology, and, of course, music. (Same as Africana Studies 130.)

131c. Sound, Self, and Society: Music and Everyday Life. Spring 2012. Michael Birenbaum Quintero.

Explores the role of music and sound as social practice, political catalyst, market commodity, site of nostalgia, environment, identity tool, and technology of the self. Enables students to write about sound and music. Addresses music as mood manipulation; noise pollution; musical taste and identity; gendered music; "urban tribes" and musical subcultures; amateur vs. specialist music-making; the music industry; music as power, notions of authenticity; sound technology. Case studies may include gym, study, and slow jam playlists; karaoke; the racial politics of crossover; Guitar Hero; music conservatories; mood music and "cock rock"; barbershop quartets; amateur brass bands; suburban heavy metal; Muzak; advertising jingles; car and café soundscapes.

132c - VPA. The Beethoven Symphonies. Spring 2012. James McCalla.
A chronological study of the nine symphonies as examples of Beethoven's compositional styles, of the classical style in general, and as a musical expression of the Enlightenment world view. Emphasis is placed on the formal structure of the works, the progressive development of Beethoven's musical thinking, and the changing musical world around him.
[133c - VPA. History of the Symphony.]
[136c - IP, VPA. Black Musics in Latin America and the Caribbean. (Same as Africana Studies 136 and Latin American Studies 136.)]
137c - ESD, VPA. CuBop, Up-Rock, Boogaloo, and Banda: Latinos Making Music in the United States. Fall 2011. Michael Birenbaum Quintero.

Surveys the musical styles of Latinos in the United States. Discusses the role of these musics in articulating race, class, gender, and sexual identities for U.S. Latinos, their circulation along migration routes, their role in identity politics and ethnic marketing, their commercial crossover to Anglo audiences, and Latin/o contributions to jazz, funk, doo-wop, disco, and hip-hop. Case studies may include Mexican-American/Chicano, Puerto Rican/Nuyorican, and CubanAmerican musics; Latin music in golden age Hollywood; Latin dance crazes from mambo to the Macarena; rock en español; the early 2000s boom of Latin artists like Shakira, Enrique Iglesias, and Jennifer Lopez; reggaetón, race politics, and the creation of the "Hurban" market; and the transnational Latin music industries of Los Angeles, New York, and Miami. (Same as Latin American Studies 137.)

## 151c - VPA. Write Your Own Beatles Tune: Introductory Practicum in Tonal Music. Every year. Fall 2011. Vineet Shende.

A largely practical, project-oriented course for students with some basic experience in music. Students learn tonal and basic chromatic vocabulary through writing and performing their own songs, mostly in the style of Lennon, McCartney, and Harrison. Melodic, harmonic, and rhythmic writing, and analysis; bass-line construction; text-setting; and basic keyboard skills are addressed. Small-group and individual lab sessions scheduled separately.
Prerequisite: Music 101, placement, or permission of the instructor.
201c - ESD, VPA. Black Women, Politics, Music, and the Divine. Fall 2011. Judith Casselberry.

Seminar. Examines the convergence of politics and spirituality in the musical work of contemporary Black women singer-songwriters in the United States. Analyzes material that interrogates and articulates the intersections of gender, race, class, and sexuality, generated across a range of religious and spiritual terrains with African diasporic/Black Atlantic spiritual moorings, including Christianity, Islam, and Yoruba. Focuses on material that reveals a womanist (Black feminist) perspective by considering the ways resistant identities shape and are shaped by artistic production. Employs an interdisciplinary approach by incorporating ethnomusicology, anthropology, literature, history, and performance and social theory. Explores the work of Shirley Caesar, The Clark Sisters, Me'shell Ndegeocello, Abby Lincoln, Sweet Honey in the Rock, and Dianne Reeves, among others. (Same as Africana Studies 201, Gender and Women's Studies 207, and Religion 201.)

Courses of Instruction
203c - VPA. Tonal Analysis. Spring 2012. Mary Hunter.
Through a survey of music from Bach to Chopin, the student learns to recognize the basic processes and forms of tonal music, to read a score fluently, and to identify chords and modulations.

Prerequisite: Music 151, or $\mathbf{1 0 1}$ with permission of the instructor.
211c - VPA. Introduction to Ethnomusicology. Every other year. Fall 2012. Michael Birenbaum Quintero.

An introduction to the principal theories and methods of ethnomusicology. Focuses on the foundational texts defining the cultural study of the world's musics, drawing upon concepts and tools from both anthropology and musicology. Addresses issues regarding musical fieldwork, recording, and cultural analysis. Students engage in ethnomusicological field projects to put into practice what they study in the classroom.

Prerequisite: One course in music, or permission of the instructor.
[218c - VPA. Introduction to Electronic Music.]
227c - ESD, VPA. Protest Music. Spring 2012. Judith Casselberry.
Focuses on the ways black people have experienced twentieth-century events. Examines social, economic, and political catalysts for processes of protest music production across genres including gospel, blues, folk, soul, funk, rock, reggae, and rap. Analysis of musical and extra-musical elements' style, form, production, lyrics, intent, reception, commodification, mass-media, and the Internet. Explores ways in which people experience, identify, and propose solutions to poverty, segregation, oppressive working conditions, incarceration, sexual exploitation, violence, and war. (Same as Africana Studies 228 and Anthropology 227.)

243c - VPA. Introduction to Composition. Every year. Spring 2012. Vineet Shende.
An introduction to the art of combining the elements of melody, harmony, rhythm, form, and orchestration to create cohesive and engaging music. Students learn techniques for generating and developing musical ideas through exercises and four main compositional assignments: a work for solo instrument, a theme and variations for solo instrument and piano, a song for voice and piano, and a multi-movement work for three to five instruments. Students also learn ways to discuss and critique their own and one another's work. Ends with a concert of student compositions.

Prerequisite: Music $\mathbf{1 0 1}$ or permission of the instructor.
253c - IP, VPA. "The Well-Tempered Subject": Music, Cultural Policy, and Subjectivity. Spring 2012. Michael Birenbaum Quintero.

Examines the mobilization of music in cultural policy as a linkage of states, political parties, development agencies, social movements, and other public institutions with private emotions, for agendas including nationalism, economic development, identity politics, multicultural tolerance and sectarian violence. Case studies may include "ethnic cleansing" music in Rwanda, India, and Yugoslavia; punk, ska and anti-racism in the UK; the Palestine-Istaeli orchestra; the Nazi embrace of Wagner; "civilizing" marching bands in the colonial Philippines and Victorian factories; censorship of "dangerous" music in Plato's Greece and Reagan's America; multiculturalism in Colombia and Singapore; indigenous and urban social movements; and charity mega-concerts.

Prerequisite: Music 211 or permission of the instructor.

255c - VPA. The Western Canon. Every other year. Fall 2012. The Department.
A historical study of many of the principal works of Western classical music, with special attention to the processes of canon formation and the changes in the canon over time.
Prerequisite: Music 203.
257c - VPA. Opera 1600-2010. Fall 2011. Mary Hunter.
Through close investigation of a small number of operas across the historical span of the genre, addresses questions of musical dramaturgy, the musical analysis of dramatic music, the social functions of opera, gender and music, and staging issues. Composers represented include, but are not limited to, Monteverdi, Handel, Mozart, Verdi, Wagner, Berg, Adams.

Prerequisite: Previous or concurrent enrollment in Music 151.
291c-294c. Intermediate Independent Study in Music. The Department.
[302c. Chromatic Harmony.]
[353c. Topics in Music History: Mozart's Operas.]
354c. Charles Ives, John Adams, and American Music(s). Spring 2012. James McCalla.
Charles Ives (1874-1954) and John Adams (b. 1947) are often depicted as "quintessentially" American composers: Ives as a rugged, if quirky, New England individualist and Transcendentalist who took American music from nineteenth-century imitations of European music to a burly, challenging modernism drawn from many sources, classical and vernacular; and Adams as a pre-eminent postmodernist who engages a very wide spectrum of contemporary performers and listeners with the immediacy and equally broad-based elements of his music. Such characterizations are both correct and incomplete: examines the works of these composers in their relations to "classical" procedures (forms, genres, compositional techniques), their "American" profiles, the range of their compositions, and what they have to say to their contemporaries and to us today.

Prerequisite: Music $\mathbf{2 0 3}$ or 243, or permission of the instructor.
361c. Topics in Music Theory: Orchestration. Every other year. Fall 2011. Vineet Shende.
An in-depth examination of factors to consider when writing for modern orchestral instruments. Students become familiar with all such instruments and arrange and transcribe works for ensembles such as string quartet, woodwind quartet, brass quintet, percussion ensemble, and full orchestra. Students also study scores by composers such as Brahms, Mahler, Ravel, Schoenberg, Stravinsky, and Takemitsu in order to further their knowledge of the techniques of instrumentation.
Prerequisite: Music 203, 243, or 302, or permission of the instructor.
401c-404c. Advanced Independent Study and Honors in Music. The Department.
451c. Senior Project in Music. Every spring. The Department.
All senior majors must take this course, which involves either a single semester of independent work or the second semester of an honors thesis. In addition to weekly individual meetings with a faculty advisor, students will meet as a group with the entire faculty several times during the semester. Must be taken in the spring of the senior year. Open only to senior music majors.

## Performange Studies

Up to six credits of individual performance and ensemble courses together may be taken for graduation credit. Music 385-387 count for academic credit and are thus not included in this limitation. Lessons, some large ensembles, chamber ensembles, and jazz ensembles may also be taken as non-credit courses.

285c-289c. Individual Performance Studies. Every semester.
Prerequisite: Permission of the music department.
The following provisions govern applied music lessons for credit:

1. Individual performance courses are intended for the continued study of instruments with which the student is already familiar. Students must take at least two consecutive semesters of study on the same instrument to receive one-half credit per semester and to receive the reduced rate. The first semester of study on the first instrument will be designated Music 285. The second and all subsequent semesters of credit lessons on the same instrument will be designated Music 286. The first semester of study on a different instrument will be designated Music 287. The second and all subsequent semesters of study on that second instrument will be designated Music 288. The number Music 289 is reserved for all semesters of study on a third instrument.
2. One-half credit is granted for each semester of study. Students are graded with regular course grades. To receive credit, students must register for lessons at the beginning of each semester of study in the Office of the Registrar and the Department of Music. Note: Add/ drop dates for lessons are earlier than add/drop dates for other courses. The deadline to add lessons is one week from the start of classes, and the deadline to drop lessons is two weeks from the start of classes.
3. Admission is by audition only. Only students who are intermediate or beyond in the development of their skills are admitted.
4. Beginning with the second semester of lessons, students must perform in an end-ofsemester public performance. Repertory classes, Lunchbreak Concerts, and other designated music department venues all count as public performances. Such performances must be registered with the department coordinator to count for credit.
5. To receive credit for Individual Performance Studies, the student must complete an academic course in music (which may include Music 385) within the first year and a half of study, or by graduation, whichever comes first.
6. Students taking lessons for credit pay a fee of $\$ 500$ for twelve one-hour lessons per semester. Junior and senior music majors and minors may take two half-credits free of charge.
7. Student Recitals. In most circumstances, a student is required to take Music 385-387 (see below) in order to perform a solo recital. In some cases, however, a student may be allowed to perform a recital without taking Music 385-387, subject to permission of the instructor, availability of suitable times, and contingent upon a successful audition in the music department. The performance date and accompanist should be established the semester before the recital is to take place.

385c-387c - VPA. Advanced Individual Performance Studies. Every semester.
Prerequisite: Music 286 and permission of the music department. The performance date and accompanist should be established the semester before the recital is to take place.

1. This option for private study is open only to students already advanced on their instruments. Students may take one or more semesters of this option. Music 386 may be repeated for
credit. The first semester of study will be designated Music 385. The second and all subsequent semesters of private lessons on the same instrument will be designated Music 386 . The number 387 is reserved for all semesters of study on a second instrument.
2. One credit is granted for each semester of study. Students are graded with regular course grades. To receive credit, students must register for lessons at the beginning of each semester of study in the Office of the Registrat and the Department of Music. Note: Add/drop dates for lessons are earlier than add/drop dates for other courses. The deadine to add lessons is one week from the start of classes, and the deadline to drop lessons is two weeks from the start of classes.
3. Admission is by departmental audition only. Subsequent semesters of advanced lessons on the same instrument may require further auditions.
4. To receive credit for lessons, the student must perform a thirty-to forty-five-minute recital at the end of the semester. The student is expected to write program notes for this recital and other written work acceptable to the faculty advisor.
5. To receive credit, the student must have an advisor from the music department faculty, and be able to demonstrate to that faculty member that he or she understands the structure and/or context of the music, and will meet all deadlines. The letter grade will be determined jointly by the applied teacher and the faculty member after the recital.
6. Fees as with half-credit lessons.

Instructors for 2011-2012 include Julia Adams (viola), Christina Astrachan (voice), Naydene Bowder (piano and harpsichord), Christina Chute (cello), Ray Cornils (organ), Matt Fogg (jazz piano), Allen Graffam (trumpet), Steve Grover (percussion), Anita Jerosch (low brass), Timothy Johnson (voice), John Johnstone (classical guitar), David Joseph (bassoon), Stephen Kecskemethy (violin), George Lopez (piano), Greg Loughman (electric bass), Tracey MacLean (jazz voice), Kathleen McNerney (oboe), Joyce Moulton (piano), Gilbert Peltola (saxophone and clarinet), Bonnie Scarpelli (voice), Dean Stein (violin), Krysia Tripp (flute), Scott Vaillancourt (tuba), and Gary Wittner (jazz guitar).
Music Ensembles. Every semester.
The following provisions govern ensemble:

1. Most ensembles are auditioned. 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 the Office of the Registrar at the beginning of each semester.
3. Grading is Credit/D/Fail. Members of ensembles must participate in all dress rehearsals and performances, or they will receive a " D " or an " 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.
5. All ensembles require public performance.
6. Chamber Ensembles are not offered for credit in the fall semester. The department may sponsor a few chamber ensembles on a non-credit basis, but all of the members must also be participating in either the orchestra or the band concurrently, with the exception of pianists.
269c. Middle Eastern Ensemble. The Department.
Meets once a week on Monday evenings, and performs pieces from the Arabic, Turkish, Armenian, and Greek traditions. Coached by oud player Amos Libby and percussionist

## Courses of Instruction

Eric La Perna, the group does one performance per semester and often collaborates with the Bowdoin Belly Dance Club. No percussion experience is required to join; students who already play string or wind instruments are invited to participate.

## 271c. Chamber Choir. Robert Greenlee.

An auditioned group of about thirty student singers. Repertory ranges widely, from Renaissance sacred music to American contemporary music and folk music of the world. The choir performs at festivals and society meetings in the U.S. (American Choral Directors Association and Society of Composers), and it tours abroad during some spring breaks. Recent trips have taken the ensemble to Germany, Ireland, England, Chile, and Canada. Monday through Thursday late afternoons must be reserved, but the choir usually rehearses only three of those days.
273c. Chorus. Anthony Antolini.
A choral ensemble composed of students, faculty, staff, and community members. Entrance is by audition. This ensemble has performed at the regional convention of the American Choral Directors Association in Baltimore. The chorus has toured throughout New England, New York, Washington, D.C., and Montreal. In summer 2008, the Chorus traveled to Greece. Recent performances have included Rachmaninoff's Liturgy of St. Jobn Cbrysostom, Mozart's Solemn Vespers, Mendelssohn's Elijah, and Vaughan Williams' Dona nobis pacem. Rehearsals are Thursday and Sunday evenings.

## 275c. Concert Band. John Morneau.

A performance ensemble open to all students with wind and percussion experience that performs several major concerts each year on campus, along with performances at campus events and ceremonies. The BCCB performs a variety of literature from the finest of the wind band repertoire to light classics, show tunes and marches. Students have been featured as soloists and conductors, and student compositions have been premiered by the ensemble. Rehearsals are Tuesday and Thursday evenings.

## 277c. Ensemble Performance. Roland Vazquez.

The Orchestra, offered only in the fall, is an auditioned group of students from Bowdoin and Bates Colleges that rehearses and performs every fall on both campuses. Recent repertoire includes large-scale symphonic works, such as Robert Schumann's Symphony No. 1, concertos with guest artists, and overtures. Rehearsals are Sunday evenings.
Chamber Ensembles occur both semesters but may be taken for credit only in the spring. They range from sonata groups through string quartets and brass and wind quintets to jazz combos. They are coached by professional freelance musicians and by Bowdoin faculty, and perform in a variety of venues on and off campus. Coaches and faculty also often play with the groups. Auditions take place at the beginning of the spring semester. Rehearsals are arranged to suit the players' and coach's schedules.
281c. World Music Ensemble: Afro-Latin Music. Michael Birenbaum Quintero.
Performs the musical forms of black populations in Latin America and the Caribbean, with particular emphasis on the marimba and drumming traditions of Afro-Colombians. May include also include Afro-Cuban, Afro-Peruvian, Afro-Puerto Rican, Afro-Dominican, and other musics. Students learn and perform multiple instruments, drumming, singing, and dance, culminating in a concert every semester. Occasional texts and audiovisual materials supplement musical learning by offering cultural and aesthetic contextualization. Rehearsals are Wednesday evenings.

283c. Jazz Ensembles. Stephen Grover.
Groups of four to six students, formed by audition, and performing both modern and classic standards, plus some original compositions by students and faculty. They perform one concert a semester on campus, and appear occasionally in other venues. Rehearsals are arranged to suit the players' and coach's schedules.

## Neurosaience

Richmond R. Thompson, Program Director Julie J. Santorella, Program Coordinator<br>Professor: Patsy S. Dickinson (Biology)<br>Associate Professors: Hadley Wilson Horch $\dagger$ (Biology), Richmond R. Thompson (Psychology)<br>Assistant Professor: Seth Ramus (Psychology)<br>Visiting Faculty: Osceola Whitney (Biology)<br>Fellow: Lisa Mangiamele<br>Laboratory Instructor: Nancy J. Curtis<br>Contributing Faculty: Bruce D. Kohorn $\dagger$, Samuel P. Putnam $\dagger$, Mary Lou Zeeman

## 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. Independent study in neuroscience may be used to fulfill one of the three elective credits. If students place out of Psychology 101 or Biology 109, 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 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 Courses

## Introductory Level and General Courses:

Biology 109a - MCSR, INS. Scientific Reasoning in Biology or Biology 102a - MCSR, INS. Biological Principles II

Chemistry 102a - MCSR, INS. Introductory Chemistry or Chemistry 109a - MCSR, INS. General Chemistry

Chemistry 225a. Organic Chemistry I
Psychology 101b. Introduction to Psychology
Psychology 252a - MCSR. Data Analysis or Mathematics 165a - MCSR. Biostatistics

## Introductory Neuroscience Course: <br> Biology 213a - MCSR, INS. Neurobiology or Psychology 218a. Physiological Psychology

Courses of Instruction

## Mid-level Neuroscience Courses:

Tbree of the following:
Biology 253a. Neurophysiology
Biology 266a. Molecular Neurobiology
Psychology 275a - INS. Laboratory in Behavioral Neuroscience: Social Behavior Psychology 276a - INS. Laboratory in Behavioral Neuroscience: Learning and Memory

## Advanced Neuroscience Course:

One of the following:
Biology 313a. Advanced Seminar in Behavioral Neuroscience (same as Psychology 313)
Biology 325a. Topics in Neuroscience
Biology 329a. Neuronal Regeneration
Psychology 315a. Hormones and Behavior
Psychology 316a. Comparative Neuroanatomy
[Psychology 318a. Neuroethology (same as Biology 318)]
Psychology 319a. Memory and Brain

## II. Electives

Three electives may be chosen from the courses listed above (but not already taken) or below:
Biology 101a - MCSR, INS. Biological Principles I
Biology 212a - MCSR, INS. Genetics and Molecular Biology
Biology 214a - MCSR, INS. Comparative Physiology
Biology 217a - MCSR, INS. Developmental Biology
Biology 224a - MCSR, INS. Biochemistry and Cell Biology
Biology 333a. Advanced Cell and Molecular Biology
Chemistry 232a - MCSR. Biochemistry
Computer Science 355a. Cognitive Architecture
Mathematics 204a - MCSR. Biomathematics (same as Biology 174)
Physics 104a - MCSR, INS. Introductory Physics II
Psychology 210b. Infant and Child Development
Psychology 216b. Cognitive Psychology
Psychology 251b. Research Design in Psychology
Psychology 260b. Abnormal Psychology
Psychology 270b. Laboratory in Cognition

Neuroscience 291a-294a. Intermediate Independent Study
Neuroscience 401a-404a. Advanced Independent Study and Honors

## Philosophy

Scott R. Sehon, Department Cbair<br>TBA, Department Coordinator<br>Professor: Scott R. Sehon<br>Associate Professors: Lawrence H. Simon $\dagger$ (Environmental Studies), Matthew F. Stuart<br>Assistant Professor: Sarah O’Brien Conly<br>Fellow: Megs Gendreau

## Requirements for the Major in Philosophy

The major consists of eight courses, which must include Philosophy 111, 112, and 223; at least one other course from the group numbered in the 200s; and two from the group numbered in the 300 s. The remaining two courses may be from any level. Students must earn grades of Cor better in courses to be counted toward the major.

## Requirements for the Minor in Philosophy

The minor consists of four courses, which must include Philosophy 111 and 112 and one course from the group numbered in the 200 s . The fourth 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, see pages 141-51.

16c. Personal Ethics. Fall 2011. Matthew Stuart.

## Introductory Courses

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

111c. Ancient Philosophy. Every fall. Fall 2011. Sarah Conly.
The sources and prototypes of Western thought. We try to understand and evaluate Greek ideas about value, knowledge, and truth.

112c. Modern Philosophy. Every spring. Spring 2012. Matthew Stuart.
A survey of seventeenth- and eighteenth-century European philosophy, focusing on discussions of the ultimate nature of reality and our knowledge of it. Topics include the nature of the mind and its relation to the body, the existence of God, and the free will problem.
Readings from Descartes, Locke, Hume, Kant, and others.
[120c. Moral Problems.]

## Courses of Instruction

142c. Philosophy of Religion. Fall 2012. Scott Sehon.
Does God exist? Can the existence of God be proven? Can it be disproven? Is it rational to believe in God? What does it mean to say that God exists (or does not exist)? What distinguishes religious beliefs from non-religious beliefs? What is the relation between religion and science? Approaches these and related questions through a variety of historical and contemporary sources, including philosophers, scientists, and theologians. (Same as Religion 142.)
145c. Truth and Morality: One, Many, or None? Spring 2012. Scott Sehon.
If we disagree about whether or not the earth is flat, or whether Obama was born in Kenya, it seems that we are disagreeing about something to which there is a single true answer; we can't all be right. On the other hand, when we contemplate the complexity of cultural diversity and worldviews in different times and places, it might seem implausible that there is a true moral view that applies to everyone at all times. Investigates whether there is moral truth: whether there are objective moral truths that hold for everyone, whether moral truth is somehow relative to particular cultures or whether there is no such thing as truth or morality. Readings from mostly contemporary sources.

152c. Death. Fall 2012. Matthew Stuart.
Considers distinctively philosophical questions about death: Do we have immortal souls? Is immortality even desirable? Is death a bad thing? Is suicide morally permissible? Does the inevitability of death rob life of its meaning? Readings from historical and contemporary sources.

## Intermediate Courses

[200c. History, Freedom, and Reason.]
210c. Philosophy of Mind. Fall 2011. Scott Sehon.
We see ourselves as rational agents: we have beliefs, desires, intentions, wishes, hopes, etc. We also have the ability to perform actions, seemingly in light of these beliefs, desires, and intentions. Is our conception of ourselves as rational agents consistent with our scientific conception of human beings as biological organisms? Can there be a science of the mind and, if so, what is its status relative to other sciences? What is the relationship between mind and body? How do our mental states come to be about things in the world? How do we know our own minds, or whether other people even have minds? Readings primarily from contemporary sources.

220c. Bioethics. Fall 2011. Sarah Conly.
Examines issues central for physicians, biological researchers, and society: cloning, genetic engineering, biological patenting, corporate funding for medical research, use of experimental procedures, and others.

## 221c. History of Ethics. Fall 2012. Lawrence H. Simon.

How should one live? What is the good? What is my duty? What is the proper method for doing ethics? The fundamental questions of ethics are examined in the classic texts of Aristotle, Hume, Kant, and Mill.

222c. Political Philosophy. Spring 2013. Lawrence H. Simon.
Examines some of the major issues and concepts in political philosophy, including freedom and coercion, justice, equality, and the nature of liberalism. Readings primarily from contemporary sources.

223a - MCSR. Logic. Every fall. Fall 2011. Scott Sehon.
The central problem of logic is to determine which arguments are good and which are bad. To this end, we introduce a symbolic language and rigorous, formal methods for seeing whether one statement logically implies another. We apply these tools to a variety of arguments, philosophical and otherwise. We also demonstrate certain theorems about the formal system we construct.

225c. Philosophy of Science. Spring 2013. Scott Sehon.
Science is often thought of as the paradigm of rational inquiry, as a method that gives us an unparalleled ability to understand the nature of the world. Others have doubted this rosy picture, and have emphasized historical and sociological aspects of the practice of science. Investigates the nature of science and scientific thought by looking at a variety of topics, including the demarcation of science and non-science, relativism and objectivity, logical empiricism, scientific revolutions, and scientific realism.
[226c. Knowledge and Its Sources.]
[227c. Metaphysics.]
229c. Philosophy in the Twentieth Century. Spring 2012. Matthew Stuart.
An examination of some key figures and works in the development of analytic philosophy. Particular attention is given to theory about the nature of physical reality and our perceptual knowledge of it, and to questions about the nature and function of language. Readings from Bertrand Russell, G. E. Moore, W. V. O. Quine, Gilbert Ryle, and others.
233. Intermediate Logic. Spring 2012. Scott Sehon.

Investigates several philosophically important results of modern logic, including Gödel's incompleteness theorems, the Church-Turing Theorem (that there is no decision procedure for quantificational validity), and Tarski's theorem (the indefinability of truth for formal languages). Also includes an introduction to modal logic, the logic of necessity and possibility.

Prerequisite: Philosophy 223 or permission of the instructor.
241c. Philosophy of Law. Spring 2012. Sarah Conly.
An introduction to legal theory. Central questions include: What is law? What is the relationship of law to morality? What is the nature of judicial reasoning? Particular legal issues include the nature and status of privacy rights (e.g., contraception, abortion, and the right to die); the legitimacy of restrictions on speech and expression (e.g., pornography, hate speech); the nature of equality rights (e.g., race and gender); and the right to liberty (e.g., homosexuality).
[258c. Environmental Ethics. (Same as Environmental Studies 258.)]
291c-294c. Intermediate Independent Study in Philosophy. The Department.

## Advanced Courses

Although courses numbered in the 300 s 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 200 s will also be found a helpful preparation.
[315c. The Good Life.]

## Courses of Instruction

320c. Metaphilosophy. Fall 2011. Matthew Stuart.
Metaphilosophy asks philosophical questions about the nature of philosophy itself: What makes a question, or a theory, a philosophical one? Do philosophical questions share a common subject matter? Does their solution involve a distinctive methodology? Do philosophical questions have determinate answers? Can philosophy give us important truths about the world, or does it only explore the meanings of words?

Prerequisite: Two courses in philosophy.
325c. Utilitarianism and Its Critics. Spring 2012. Sarah Conly.
How should we decide what to do? Utilitarianism is the view that the right act is the act that produces the greatest happiness of the greatest number-an appealing view in many respects, since we do want to be happy. However, it doesn't give much respect to the value of the individual or the value of liberty. Utilitarians argue that happiness is so desirable that it is worth sacrificing these other things. Examines the arguments in the debate between those who value only the maximization of happiness and those who think happiness must sometimes take second place to other things, one of the most important issues in ethics.
Prerequisite: One course in philosophy numbered 100 or higher or permission of the instructor.
[332c. Origins of Analytic Philosophy.]
[334c. Free Will.]
[337c. Hume.]
[392c. Advanced Topics in Environmental Philosophy. (Same as Environmental Studies 392.)]

401c-404c. Advanced Independent Study and Honors in Philosophy. The Department.

## Physics and Astronomy

Thomas Baumgarte, Department Cbair
Dominica Lord-Wood, Department Coordinator
Professors: Thomas Baumgarte, Madeleine E. Msall $\dagger$, Stephen G. Naculich, Dale A. Syphers
Associate Professor: Mark O. Battle
Visiting Faculty: Roberto Salgado
Lecturer: Karen Topp
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 35-36. A major with an interest in an interdisciplinary area such as geophysics, biophysics, or oceanography will choose appropriate courses in related departments. Secondary school teaching requires a broad base in science courses, as well as the necessary courses for teacher certification. For a career in industrial management, some courses in economics and government should be included.

## Requirements for the Major in Physics

A student majoring in physics is expected to complete Mathematics 161, 171, Physics 103, 104, 223, 229, one 300 -level methods course (Physics 300, 301, or 302), and three additional approved courses higher than 104 (one of which may be Mathematics 181 or higher). At least five physics courses must be taken at Bowdoin.
For honors work, a student is expected to complete Mathematics 181, and Physics 103, 104, $223,229,300,310,451$, and four additional courses, two of which must be at the 300 level, and one of which may be in mathematics numbered higher than Mathematics 181.

## Requirements for the Minor in Physics

The minor consists of at least four Bowdoin physics courses numbered 103 or higher, one of which must be Physics 104.

## Interdisciplinary Majors

The department participates in interdisciplinary programs in chemical physics and earth and oceanographic science and physics. See page 198.

## Prerequisites

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

## Introductory, Intermediate, and Advanced Courses

[63a. Physics of the Twentieth Century.]
81a - INS. Physics of the Environment. Spring 2012. Mark Battle.
An introduction to the physics of environmental issues, including past climates, anthropogenic climate change, ozone destruction, and energy production and efficiency. (Same as
Environmental Studies 81.)
82a - MCSR, INS. Physics of Musical Sound. Fall 2011. Karen Topp.
An introduction to the physics of sound, specifically relating to the production and perception of music. Topics include simple vibrating systems; waves and wave propagation; resonance; understanding intervals, scales, and tuning; sound intensity and measurement; sound spectra; how various musical instruments and the human voice work. Students expected to have some familiarity with basic musical concepts such as scales and intervals. Not open to students who have credit for or are concurrently taking any physics course numbered $\mathbf{1 0 0}$ or higher. Formerly Physics 50.

93a - MCSR. Introduction to Physical Reasoning. Fall 2011. Dale Syphers.
Climate science. Quantum Physics. Bioengineering. Rocket science. Who can understand it? Anyone with high school mathematics (geometry and algebra) can start. Getting started in physics requires an ability to mathematically describe real world objects and experiences. Prepares students for additional work in physical science and engineering by focused practice in quantitative description, interpretation, and calculation. Includes hands-on measurements, some introductory computer programming, and many questions about the physics all around us. To ensure proper placement, students are expected to bave taken the physics placement examination prior to registering for Physics 93.

## Courses of Instruction

103a - MCSR, INS. Introductory Physics I. Every semester. Fall 2011. Mark Battle and Roberto Salgado. Spring 2012. Roberto Salgado.

An introduction to the conservation laws, forces, and interactions that govern the dynamics of particles and systems. Shows how a small set of fundamental principles and interactions allow us to model a wide variety of physical situations, using both classical and modern concepts. A prime goal of the course is to have the participants learn to actively connect the concepts with the modeling process. Three hours of laboratory work per week. To ensure proper placement, students are expected to have taken the physics placement examination prior to registering for Physics 103.

Prerequisite: Previous credit or concurrent registration in Mathematics 161 or higher, or permission of the instructor.

104a - MCSR, INS. Introductory Physics II. Every semester. Fall 2011. Thomas Baumgarte. Spring 2012. Thomas Baumgarte and Stephen Naculich.

An introduction to the interactions of matter and radiation. Topics include the classical and quantum physics of electromagnetic radiation and its interaction with matter, quantum properties of atoms, and atomic and nuclear spectra. Three hours of laboratory work per week will include an introduction to the use of electronic instrumentation.

Prerequisite: Physics 103 and previous credit or concurrent registration in Mathematics 171, 172 , or 181 , or permission of the instructor.

162a - INS. Stars and Galaxies. Every spring. Spring 2012. Karen Topp.
A quantitative introduction to astronomy, with emphasis on stars, stellar dynamics, and the structures they form, from binary stars to galaxies. Topics include the night sky, stellar structure and evolution, white dwarfs, neutron stars, black holes, quasars, and the expansion of the universe. Several nighttime observing sessions are required. Intended for both science majors and non-majors who are secure in their mathematical skills. A working familiarity with algebra, trigonometry, geometry, and calculus is expected. Does not satisfy pre-med or other science departments' requirements for a second course in physics.

Prerequisite: Mathematics 161 or higher, or permission of the instructor.
223a - INS. Electric Fields and Circuits. Every fall. Fall 2011. Dale Syphers.
The basic phenomena of the electromagnetic interaction are introduced. The basic relations are then specialized for a more detailed study of linear circuit theory. Laboratory work stresses the fundamentals of electronic instrumentation and measurement with basic circuit components such as resistors, capacitors, inductors, diodes, and transistors. Three hours of laboratory work per week.

Prerequisite: Physics 104 or permission of the instructor.
224a - MCSR. Quantum Physics and Relativity. Every spring. Spring 2012. Stephen Naculich.

An introduction to two cornerstones of twentieth-century physics, quantum mechanics, and special relativity. The introduction to wave mechanics includes solutions to the timeindependent Schrödinger equation in one and three dimensions with applications. Topics in relativity include the Galilean and Einsteinian principles of relativity, the "paradoxes" of
special relativity, Lorentz transformations, space-time invariants, and the relativistic dynamics of particles. Not open to students who have credit for or are concurrently taking Physics 275, 310 , or 375.

Prerequisite: Physics 104 or permission of the instructor.
229a. Statistical Physics. Every spring. Spring 2012. Mark Battle.
Develops a framework capable of predicting the properties of systems with many particles. This framework, combined with simple atomic and molecular models, leads to an understanding of such concepts as entropy, temperature, and chemical potential. Some probability theory is developed as a mathematical tool.

Prerequisite: Physics 104 or permission of the instructor.
235a. Engineering Physics. Every other spring. Spring 2012. Roberto Salgado.
Examines the physics of materials from an engineering viewpoint, with attention to the concepts of stress, strain, shear, torsion, bending moments, deformation of materials, and other applications of physics to real materials, with an emphasis on their structural properties. Also covers recent advances, such as applying these physics concepts to ultra-small materials in nano-machines. Intended for physics majors and architecture students with an interest in civil or mechanical engineering or applied materials science.

Prerequisite: Physics 104 or permission of the instructor.
[240a. Modern Electronics.]
[250a - MCSR. Acoustics.]
251a. Physics of Solids. Every other spring. Spring 2012. Dale Syphers.
Solid state physics describes the microscopic origin of the thermal, mechanical, electrical and magnetic properties of solids. Examines trends in the behavior of materials and evaluates the success of classical and semi-classical solid state models in explaining these trends and in predicting material properties. Applications include solid state lasers, semiconductor devices, and superconductivity. Intended for physics, chemistry, or earth and oceanographic science majors with an interest in materials physics or electrical engineering.

Prerequisite: Physics 104 or permission of the instructor.
257a. Atmosphere and Ocean Dynamics. Fall 2011. Mark Battle.
A mathematically rigorous analysis of the motions of the atmosphere and oceans on a variety of spatial and temporal scales. Covers fluid dynamics in inertial and rotating reference frames, as well as global and local energy balance, applied to the coupled ocean-atmosphere system. (Same as Earth and Oceanographic Science 257 and Environmental Studies 253.)
Prerequisite: Physics 104 or permission of the instructor.
[262a. Astrophysics.]

## [280a. Nuclear and Particle Physics.]

285. Topics in Contemporary Physics. Fall 2011. Thomas Baumgarte.

Seminar exploring recent results from research in all fields of physics. Focuses on discussion of papers in the scientific literature. Grading is Credit/D/Fail. One-half credit.

Prerequisite: Physics 223, 224, or 229, or permission of the instructor.

## Courses of Instruction

291a-294a. Intermediate Independent Study in Physics. The Department.
Topics to be arranged by the student and the faculty. If the investigations concern the teaching of physics, this course may satisfy certain of the requirements for the Maine State Teacher's Certificate. Students doing independent study normally have completed a 200 -level physics course.

300a. Methods of Theoretical Physics. Every fall. Fall 2011. Stephen Naculich.
Mathematics is the language of physics. Similar mathematical techniques occur in different areas of physics. A physical situation may first be expressed in mathematical terms, usually in the form of a differential or integral equation. After the formal mathematical solution is obtained, the physical conditions determine the physically viable result. Examples are drawn from heat flow, gravitational fields, and electrostatic fields.

Prerequisite: Physics 104 and Mathematics 181, or permission of the instructor.
301a. Methods of Experimental Physics. Every spring. Spring 2012. Dale Syphers.
Intended to provide advanced students with experience in the design, execution, and analysis of laboratory experiments. Projects in optical holography, nuclear physics, cryogenics, and materials physics are developed by the students.

Prerequisite: Physics 223 or permission of the instructor.
302a. Methods of Computational Physics. Every other fall. Fall 2011. Roberto Salgado.
An introduction to the use of computers to solve problems in physics. Problems are drawn from several different branches of physics, including mechanics, hydrodynamics, electromagnetism, and astrophysics. Numerical methods discussed include the solving of linear algebra and eigenvalue problems, ordinary and partial differential equations, and Monte Carlo techniques. Basic knowledge of a programming language is expected.

Prerequisite: Physics 104 and Computer Science 101, or permission of the instructor.
310a. Quantum Mechanics. Every fall. Fall 2011. Stephen Naculich.
A mathematically rigorous development of quantum mechanics, emphasizing the vector space structure of the theory through the use of Dirac bracket notation. Linear algebra will be developed as needed.
Prerequisite: Physics 224 and $\mathbf{3 0 0}$, or permission of the instructor.
320a. Electromagnetic Theory. Every other spring. Spring 2012. Thomas Baumgarte.
First the Maxwell relations are presented as a natural extension of basic experimental laws; then emphasis is given to the radiation and transmission of electromagnetic waves.

Prerequisite: Physics 223 and 300, or permission of the instructor.
[357a. The Physics of Climate. (Same as Earth and Oceanographic Science 357 and Environmental Studies 357.)]
[370a. Advanced Mechanics.]
[375a. General Relativity.]
401a-404a. Advanced Independent Study in Physics. The Department.
Topics to be arranged by the student and the faculty. Students doing advanced independent study normally have completed a 300 -level physics course.

Programs of study are available in semiconductor physics, microfabrication, superconductivity and superfluidity, astrophysics, relativity, ultrasound, and atmospheric physics. Work done in these topics normally serves as the basis for an honors paper.
Prerequisite: Permission of the instructor.

# Psychology 

Paul E. Schaffner, Department Cbair<br>Donna M. Trout, Senior Department Coordinator

Professors: Barbara S. Held, Louisa M. Slowiaczek $\dagger$, Richmond R. Thompson (Neuroscience)
Associate Professors: Suzanne Lovett, Samuel P. Putnam $\dagger$, Paul E. Schaffner
Assistant Professor: Seth J. Ramus (Neuroscience)
Visiting Faculty: Katherine M. Mathis, Kimberly J. Robinson
Fellow: Desdamona Rios (Gender and Women's Studies)

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 223). 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 courses are selected by students with their advisors and are subject to departmental review. Each student must take three core courses: an introductory course, Psychology 101, which will serve as a prerequisite to further study in the major; and Psychology 251 and 252. These core courses should be completed before the junior year, if possible. Students must take three electives numbered 200 or higher. Finally, students must take laboratory and advanced courses. Students have the option of taking either (a) two laboratory courses numbered 260-279 and two advanced (300-level) courses, or (b) three laboratory courses numbered 260-279 and one advanced (300-level) course. Note that either Psychology 275 or $\mathbf{2 7 6}$, but not both, may count toward the two- or three-course laboratory-requirement options. Similarly, either Psychology 320 or 321, but not both, may count toward the two-advanced-course-requirement option; and no more than one course from among Psychology 315, 316, 318 (same as Biology 318), and 319 may count toward the two-advanced-course-requirement option. Majors 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 advancedcourse requirement.

Students who are considering a major in psychology are encouraged to enroll in Psychology 101 during their first year at Bowdoin and to enroll in Psychology 251 and 252 during their second year. Students must take Psychology 251 before 252. Psychology 251 must be taken prior to $\mathbf{2 6 0}$. Psychology 252 must be taken prior to, or concurrent with, 270, 274, 275, 276,

## Courses of Instruction

and 277; and prior to any 300 -level course. 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 300 -level courses taken elsewhere are not ordinarily counted toward the major.

## Requirements for the Minor in Psychology

The psychology minor comprises six courses, including Psychology 101, 251, and 252, and one laboratory course.

## Grade Requirements

To fulfill a major (or minor) requirement in psychology, or to serve as a prerequisite for another psychology course, a grade of C - or better must be earned in a course. There is one exception: Psychology 101 may be taken with the Credit/D/Fail grading option, and it will count toward the major (or minor) and serve as a prerequisite for other psychology courses 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 receive one AP credit and are considered to have met the prerequisite for courses requiring Psychology 101. This credit also counts toward the major or minor. Students who receive an IB score (higher level) of 5 or higher on the psychology exam receive one IB credit and are considered to have met the prerequisite for courses requiring Psychology 101. This credit also counts toward the major or minor. No AP or IB credit for psychology is awarded if a student takes Psychology 101. Students do not receive duplicate credit for AP and IB exams in psychology.

## Requirements for the Major in Neuroscience

See Neuroscience, pages 223.

## Courses in Psychology

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
10b. What's on Your Mind? An Introduction to the Brain and Behavior. Fall 2011. Lisa A. Mangiamele.

## Introductory Courses

101b. Introduction to Psychology. Every semester. The Department.
A general introduction to the major concerns of contemporary psychology, including physiological psychology, perception, learning, cognition, language, development, personality, intelligence, and abnormal and social behavior. Recommended for first- and second-year students. Juniors and seniors should enroll in the spring semester.

## Intermediate Courses

210b. Infant and Child Development. Spring 2012. The Department.
A survey of major changes in psychological functioning from conception through childhood. Several theoretical perspectives are used to consider how physical, personality, social, and cognitive changes jointly influence the developing child's interactions with the environment.

Prerequisite: Psychology 101.
211b. Personality. Every fall. Barbara S. Held.
A comparative survey of theoretical and empirical attempts to explain personality and its development. The relationships of psychoanalytic, interpersonal, humanistic, and behavioral approaches to current research are considered.

Prerequisite: Psychology 101.
212b. Social Psychology. Every spring. Paul E. Schaffner.
A survey of theory and research on individual social behavior. Topics include self-concept, social cognition, affect, attitudes, social influence, interpersonal relationships, and cultural variations in social behavior.

Prerequisite: Psychology 101 or Sociology 101.
214b - ESD. Psychology of Women. Fall 2011. Desdamona Rios.
A survey of feminist theories and empirical findings on the psychology of women, as well as controversy related to and current approaches for studying women. Considers how the social construction of gender, the gendered nature of social institutions, and the way that gender intersects with race/ethnicity, sexual orientation, social class, and other social categories contribute to the psychology of women. (Same as Gender and Women's Studies 214.)

216b. Cognitive Psychology. Every fall. Fall 2011. Katherine M. Mathis.
A survey of theory and research examining how humans perceive, process, store, and use information. Topics include visual perception, attention, memory, language processing, decision making, and cognitive development.

Prerequisite: Psychology 101.
218a. Physiological Psychology. Every spring. Richmond R. Thompson.
An introductory survey of biological influences on behavior. The primary emphasis is on the physiological regulation of behavior in humans and other vertebrate animals, focusing on genetic, developmental, hormonal, and neuronal mechanisms. Additionally, the evolution of these regulatory systems is considered. Topics discussed include perception, cognition, sleep, eating, sexual and aggressive behaviors, and mental disorders.

Prerequisite: One of the following: Psychology 101, Biology 102 or 109.
251b. Research Design in Psychology. Every fall. Paul E. Schaffner. Spring 2012. Kathy M. Mathis.

A systematic study of the scientific method as it underlies psychological research. Topics include prominent methods used in studying human and animal behavior, the logic of causal analysis, experimental and non-experimental designs, issues in internal and external validity, pragmatics of careful research, and technical writing of research reports.

Prerequisite: Psychology 101.

## Courses of Instruction

252a - MCSR. Data Analysis. Every fall. Suzanne Lovett. Every spring. Seth J. Ramus.
An introduction to the use of descriptive and inferential statistics and design in behavioral research. Weekly laboratory work in computerized data analysis. Required of majors no later than the junior year, and preferably by the sophomore year.

Prerequisite: Psychology 101, and one of the following: Psychology 251, Biology 102 or 109.

## Courses that Satisfy the Laboratory Requirement

260b. Abnormal Psychology. Every spring. Spring 2012. The Department.
A general survey of the nature, etiology, diagnosis, and treatment of common patterns of mental disorders. Students participate in a weekly supervised practicum at a local psychiatric unit.

Prerequisite: Psychology 211 and 251.
270b. Laboratory in Cognition. Every fall. Fall 2011. Katherine M. Mathis.
An analysis of research methodology and experimental investigations in cognition, including such topics as auditory and sensory memory, visual perception, attention and automaticity, retrieval from working memory, implicit and explicit memory, metamemory, concept formation and reasoning. Weekly laboratory sessions allow students to collect and analyze data in a number of different areas of cognitive psychology.
Prerequisite: Psychology 216, 251, and previous credit or concurrent registration in Psychology 252.

## 274b. Laboratory in Group Dynamics. Every fall. Paul E. Schaffner.

Principles and methods of psychological research, as developed in Psychology 251 and 252, are applied to the study of small group interaction. Students design, conduct, and report on social behavior research involving an array of methods to shape and assess interpersonal behavior.

Prerequisite: Psychology 211, 212, or 219; Psychology 251; and previous credit or concurrent registration in Psychology 252.
275a - INS. Laboratory in Behavioral Neuroscience: Social Behavior. Every spring. Richmond R. Thompson.

A laboratory course that exposes students to modern techniques in neuroscience that can be applied to the study of social behavior. Underlying concepts associated with various molecular, neuroanatomical, pharmacological, and electrophysiological methods are discussed in a lecture format. Students then use these techniques in laboratory preparations that demonstrate how social behavior is organized within the central nervous system of vertebrate animals, including humans.

Prerequisite: Psychology 218 or Biology 213; one of the following: Psychology 251,
Biology 102 or 109; and previous credit or concurrent registration in Psychology 252 or Mathematics 165.

276a - INS. Laboratory in Behavioral Neuroscience: Learning and Memory. Fall 2011. Seth J. Ramus.

Explores current research and theories in the neurobiology of learning and memory by examining the modular organization of the brain with an emphasis on a brain systems-level approach to learning and memory, using both lectures and laboratory work. Memory is not
a unitary phenomenon, rather, different parts of the brain are specialized for storing and expressing different kinds of memory. In addition to discussing contemporary research, students use modern neuroscientific methods in the laboratory to demonstrate how different memory systems can be dissociated. Techniques include behavioral, neurosurgical, and histological analysis in vertebrate species.

Prerequisite: Psychology 218 or Biology 213; one of the following: Psychology 251, Biology 102 or 109; and previous credit or concurrent registration in Psychology 252 or Mathematics 165.

277b. Research in Developmental Psychology. Every spring. Spring 2012. Kimberly J. Robinson.

The multiple methods used in developmental research are examined both by reading research reports and by designing and conducting original research studies. The methods include observation, interviews, questionnaires, lab experiments, among others. Students learn to evaluate the relative strengths and weaknesses of both qualitative and quantitative approaches.

Prerequisite: Psychology 210, 213, 215, or 251, and previous credit or concurrent registration in Psychology 252.
[278b. Introduction to Qualitative Research Methods. (Same as Gender and Women's Studies 304.)]

## Advanced Courses

[303b. Health Psychology.]
Prerequisite: Psychology 251 and 252.
309b. Psychotherapy, Psychology, and Philosophy. Every fall. Barbara S. Held.
Many clinical psychologists are returning to psychology's roots in philosophy for guidance on how to best understand the nature and purposes of psychotherapy. Considers the clinical, scientific, and underlying philosophical issues that pertain to different systems of psychotherapy. In exploring different approaches to psychotherapy, particular attention is given to such questions as the nature of personhood and the self, methods of obtaining self-knowledge and warrant for claims about self-knowledge, whether humans have free will, the nature of therapeutic change, and the nature of human happiness or well being. Current debates about a proper science of psychotherapy are emphasized.

Prerequisite: Psychology 211, 251, and 252.
313a. Advanced Seminar in Behavioral Neuroscience. Spring 2012. Osceola Whitney.
Focuses on genes and regulatory sequences that contribute to the organization and functioning of neural circuits and molecular pathways in the brain that support social behavior. Topics of interest and discussion include the functional genomics of neural and behavioral plasticity in cichlid fishes, gene regulation and social behavior in honey bees, learned vocal communication in songbirds, and epigenetic regulation of gene expression and behavior. (Same as Biology 313.)
Prerequisite: Psychology 218 or Biology 213; one of the following: Psychology 251, Biology 102 or 109; and Psychology 252 or Mathematics 165.

## Courses of Instruction

315a. Hormones and Behavior. Every other fall. Fall 2012. Richmond R. Thompson.
An advanced discussion of concepts in behavioral neuroendocrinology. Topics include descriptions of the major classes of hormones, their roles in the regulation of development and adult behavioral expression, and the cellular and molecular mechanisms responsible for their behavioral effects. Hormonal influences on reproductive, aggressive, and parental behaviors, as well as on cognitive processes are considered.

Prerequisite: Psychology 218 or Biology 213; one of the following: Psychology 251, Biology 102 or 109; and Psychology 252 or Mathematics 165.

316a. Comparative Neuroanatomy. Every other fall. Fall 2011. Richmond R. Thompson.
An advanced discussion of concepts in vertebrate brain organization. The primary emphasis is upon structure/function relationships within the brain, particularly as they relate to behavior. Topics include basic neuroanatomy, brain development and evolution, and the neural circuitry associated with complex behavioral organization. Studies from a variety of animal models and from human neuropsychological assessments are used to demonstrate general principles of brain evolution and function.

Prerequisite: Psychology 218 or Biology 213; one of the following: Psychology 251, Biology 102 or 109; and Psychology 252 or Mathematics 165.
317b. The Psychology of Language. Every spring. Spring 2012. Kathy M. Mathis.
An examination of psychological factors that affect the processing of language, including a discussion of different modalities (auditory and visual language) and levels of information (sounds, letters, words, sentences, and text/discourse). Emphasis is on the issues addressed by researchers and the theories developed to account for our language abilities.

Prerequisite: Psychology 216, 251, and 252.
[318a. Neuroethology. (Same as Biology 318.)]
319a. Memory and Brain. Every other spring. Spring 2012. Seth J. Ramus.
Advanced seminar exploring the biological basis of learning and memory from a cellular to a systems-level analysis, providing insights into the mechanisms and organization of neural plasticity. Includes topics in molecular neuroscience, neurophysiology, neuropharmacology, and systems neuroscience. Discussions include evaluation of current research and theories, as well as a historical perspective.
Prerequisite: Psychology 218 or Biology 213; one of the following: Psychology 251, Biology 102 or 109; and Psychology 252 or Mathematics 165.

## Advanced Courses

320b. Social Development. Every fall. Fall 2011. Kimberley J. Robinson.
Research and theory regarding the interacting influences of biology and the environment as they are related to social and emotional development during infancy, childhood, and adolescence. Normative and idiographic development in a number of domains, including morality, aggression, personality, sex roles, peer interaction, and familial relationships are considered.

Prerequisite: Psychology 210, 213, 214, or 215; and Psychology 251 and 252.

321b. Cognitive Development. Every spring. Spring 2012. The Department.
Examines the development of cognitive understanding and cognitive processes from infancy through adolescence. Emphasis on empirical research and related theories of cognitive development. Topics include infant perception and cognition, concept formation, language development, theory of mind, memory, problem solving, and scientific thinking.
Prerequisite: Psychology 210, 213, or 215; and Psychology 251 and 252.
[325b. Organizational Behavior.]
328b. Psychological Studies of Creativity. Spring 2012. Paul E. Schaffner.
Explores the nature, origins, processes, and consequences of creative activity in the arts and sciences, in public affairs, and in daily living. Examines psychological processes that support creative thought and action by individuals and collaborative groups, and ways that sociocultural contexts stimulate, recognize, and sanction such work. Readings and seminar discussions address aspects of personality, aptitude, cognition, motivation, self-regulation, and psychopathology in relation to creativity; and the influences of family and education in developing and expressing creative potential.

Prerequisite: Psychology 252.

## Independent Study and Honors

291b-294b. Intermediate Independent Study in Psychology. The Department. 401b-404b. Advanced Independent Study and Honors in Psychology. The Department.

## Religion

Jorunn J. Buckley, Department Chair
Lynn A. Brettler, Department Coordinator
Professor: John C. Holt (Asian Studies)
Associate Professors: Jorunn J. Buckley, Robert G. Morrison, Elizabeth A. Pritchard $\dagger$
Fellow: David J. Howlett

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.

## Requirements for the Major in Religion

The major consists of nine courses in religion, including two required courses--Religion 101: Introduction to the Study of Religion and Religion 390: Theories about Religion. For the seven remaining courses, four courses are to be taken at the 200 level, 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 300 -level course in religion and two electives, one of which may be a first year seminar and the other (or both) at the 100,200 , or 300 level.

## Courses of Instruction

In order to enroll in Religion 390, 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 will count toward the major. Courses that will count toward the major or minor must be taken on a graded basis (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 religion website for more details.

## Requirements for the Minor in Religion

A minor consists of five courses-Religion 101, three courses at the 200 level or higher (among these three electives, at least one course shall be in Western religions and cultures and one in Asian religions and cultures) and Religion 390.

## First-Year Seminars

These introductory courses focus on the study of a specific aspect of religion, and may draw on other fields of learning. They are not intended as prerequisites for more advanced courses in the department unless specifically designated as such. They include readings, discussion, reports, and writing. Topics change from time to time to reflect emerging or debated issues in the study of religion. For a full description of first-year seminars, see pages 141-51.
[10c. Seeking a Historical Jesus.]
14c. Heresy and Orthodoxy. Fall 2011. Jorunn Buckley.
[16c. Sex and the Church. (Same as Gay and Lesbian Studies 16 and Gender and Women's Studies 17.)]
[25c. The Islamic Revolution of Iran.]
27c. Astral Religion in the Near East and Classical Antiquity. Fall 2011. Robert Morrison.

## Introductory Courses

101c - ESD. Introduction to the Study of Religion. Spring 2012. Robert Morrison.
Basic concepts, methods, and issues in the study of religion, with special reference to examples comparing and contrasting Asian and Western religions. Lectures, films, discussions, and readings in a variety of texts such as scriptures, novels, and autobiographies, along with modern interpretations of religion in ancient and contemporary, Asian and Western contexts.

110c. Mormonism: Prophets, Polygamy, and Proselytizing. Fall 2011. David Howlett.
Investigates how Mormons have gone from an upstart, persecuted sect to participants in the conservative mainstream of American religion and culture. Topics include the Mormon creation of new scriptures; the role and evolution of prophets; religious violence; conflict
berween church and state; the dynamics of religious schism; temple spaces and the politics of secrecy; polygamy and the family; constructions of race, gender, and sexuality; missions and evangelism; modern pilgrimage; and the globalization of an American religion. Students encounter the ever-changing public faces of Mormonism(s), from Joseph Smith to Glenn Beck.
[125c - ESD, IP. Entering Modernity: European Jewry. (Same as History 125.)]
142c. Philosophy of Religion. Fall 2012. Scott Sehon.
Does God exist? Can the existence of God be proven? Can it be disproven? Is it rational to believe in God? What does it mean to say that God exists (or does not exist)? What distinguishes religious beliefs from non-religious beliefs? What is the relation between religion and science? Approaches these and related questions through a variety of historical and contemporary sources, including philosophers, scientists, and theologians. (Same as Philosophy 142.)

## Intermediate Courses

Asian Religions (219-229), Bible and Comparative Studies (215, 216, 205, 275), Christianity and Gender (249-259), Islam and Post-Biblical Judaism (207, 208, 210, 232)
[200c. Creating the World: Genesis and Its Interpreters. (Same as History 200.)]
201c - ESD, VPA. Black Women, Politics, Music, and the Divine. Fall 2011. Judith Casselberry:

Seminar. Examines the convergence of politics and spirituality in the musical work of contemporary Black women singer-songwriters in the United States. Analyzes material that interrogates and articulates the intersections of gender, race, class, and sexuality, generated across a range of religious and spiritual terrains with African diasporic/Black Atlantic spiritual moorings, including Christianity, Islam, and Yoruba. Focuses on material that reveals a womanist (Black feminist) perspective by considering the ways resistant identities shape and are shaped by arristic production. Employs an interdisciplinary approach by incorporating ethnomusicology, anthropology, literature, history, and performance and social theory. Explores the work of Shirley Caesar, The Clark Sisters, Me'shell Ndegeocello, Abby Lincoln, Sweet Honey in the Rock, and Dianne Reeves, among others. (Same as Africana Studies 201, Gender and Women's Studies 207, and Music 201.)

204c. Science, Magic, and Religion. Spring 2012. Dallas Denery.
Traces the origins of the scientific revolution through the interplay between late-antique and medieval religion, magic, and natural philosophy. Particular attention is paid to the conflict between paganism and Christianity, the meaning and function of religious miracles, the rise and persecution of witchcraft, and Renaissance hermericism. (Same as History 204.)
Prerequisite: History 110 or permission of the instructor.
Note: This course fulfills the pre-modern requirement for history majors.
205c. Evil in Religious Contexts. Spring 2012. Jorunn Buckley.
Uses literary, anthropological, and historical examples in order to investigate religious views of "evil" to ask: "Eril" to whom, for/against whom, under what circumstances? Is "evil" a given, and does it hare an unquestioned, autonomous existence? Deals with evil as religious/cultural constructs. Among the issues are witchcraft, demons, political-religious-demagogic leaders and their followers, and religious ideologies of murderous-suicidal groups. Sources range from the

## Courses of Instruction

early medieval Beowulf to present-day extreme forms of Christianity and Islam, covering various time-periods and geographical locales. Not theological or conceptual-abstract; focuses on pragmatics.

## [207c - ESD. Introduction to Judaism.]

208c - IP. Islam. Fall 2011. Robert G. Morrison.
With an emphasis on primary sources, pursues major themes in Islamic civilization from the revelation of the Qur'an to Muhammad until the present. From philosophy to political Islam, and from mysticism to Muslims in America, explores the diversity of a rapidly growing religious tradition.

## [210c - IP. Esoteric Themes in Islamic Thought.]

211c - ESD, IP. Muslim Women, Islam, and Feminism. Spring 2012. Samaa Abdurraqib.
Interrogates commonly held beliefs about how Islam regards Muslim women. A broad range of Muslim women, some who identify as feminist, others who do not, consider Islam crucial to their gendered identity. There are also feminist women who were born Muslim, some of whom continue to practice Islam, others who do not, who consider Islam as oppressing their gendered identity. Whatever their positions, it is crucial that these women discuss their relationships, as women, to Islam. In this current historical and cultural moment, critics and proponents of Islam often speak on behalf of Muslim women, while Muslim women remain silent. Readings include novels and poetry by Mohja Kahf, memoirs by Leila Ahmed and Fatima Mernissi, and a wide variety of other articles and texts written by Muslim women about their religious practices, their feminist practices, and how these practices affect their lives and perspectives. (Same as Gender and Women's Studies 211.)

## [215c - ESD. The Hebrew Bible in Its World.]

216c - ESD. The New Testament in Its World. Fall 2011. Jorunn Buckley.
Situates the Christian New Testament in its Hellenistic cultural context. While the New Testament forms the core of the course, attention is paid to parallels and differences in relation to other Hellenistic religious texts: Jewish, (other) Christian, and pagan. Religious leadership, rituals, secrecy, philosophy of history, and salvation are some of the main themes.

219c. Religion and Fiction in Modern South Asia. Spring 2013. John Holt.
A study of the Hindu and Buddhist religious cultures of modern South Asia as they have been imagined, represented, interpreted, and critiqued in the literary works of contemporary and modern South Asian writers of fiction and historical novels. (Same as Asian Studies 219.)

220c - IP. Hindu Literatures. Fall 2012. John Holt.
A reading of various genres of translated Hindu religious literature, including Rig Veda hymns, philosophical Upanishads, Yoga Sutras, the epics Ramayana and Mababharata, including the Bhagavad Gita, selected myths from the Puranas, and poetry and songs of medieval devotional saints. Focuses on development of various types of religious worldviews and religious experiences within Hindu traditions, as reflected in classical Sanskrit and vernacular literature of India. (Same as Asian Studies 240.)

221c - IP. Hindu Cultures. Spring 2013. John Holt.
A consideration of various types of individual and communal religious practice and religious expression in Hindu tradition, including ancient ritual sacrifice, mysticism and yoga (meditation), dharma and karma (ethical and political significance), pilgrimage (as inward
spiritual journey and outward ritual behavior), puja (worship of deities through seeing, hearing, chanting), rites of passage (birth, adolescence, marriage, and death), etc. Focuses on the nature of symbolic expression and behavior as these can be understood from indigenous theories of religious practice. Religion 220 is recommended as a previous course. (Same as Asian Studies 241.)

222c - ESD, IP. Theravada Buddhism. Fall 2011. John Holt.
An examination of the major trajectories of Buddhist religious thought and practice as understood from a reading of primary and secondary texts drawn from the Theravada traditions of India, Sri Lanka, Thailand, and Burma. (Same as Asian Studies 242.)
223c - IP. Mahayana Buddhism. Spring 2012. John Holt.
Studies the emergence of Mahayana Buddhist worldviews as reflected in primary sources of Indian, Chinese, and Japanese origins. Buddhist texts include the Buddhacarita ("Life of Buddha"), the Sukhavati Vyuba ("Discourse on the 'Pure Land"'), the Vajraccedika Sutra (the "Diamond-Cutter"), the Prajnaparamitra-brdaya Sutra ("Heart Sutra of the Perfection of Wisdom"), the Saddharmapundarika Sutra (the "Lotus Sutra"), and the Platform Sutra of the Sixth Patriarch, among others. (Same as Asian Studies 223.)
[225c - ESD, IP. Religion and Political Violence in South Asia. (Same as Asian Studies 226.)]

## [232c - IP. Approaches to the Qur'an.]

237c. Judaism Under Islam. Spring 2012. Robert Morrison.
Since the rise of Islam in the early seventh century C.E., Jews have lived in the Islamic world. The historical experience of these Jews has shaped their religious traditions in ways that have touched Jews worldwide. Places developments in Jewish liturgy, thought, and identity within the context of Islamic civilization. Answers the question of how Jews perceive themselves and Judaism with regard to Muslims and Islam. Analyzes the significance of the Jewish experience under Islam for current debates in Judaism and in Middle East politics.
[250c. Modern Christian Thought.]
[251c. Christianity.]
[252c. Marxism and Religion.]
[253c - ESD. Gender, Body, and Religion. (Same as Gender and Women's Studies 256.)] 255c. Christianity in the United States: Conflict, Continuity, and Change since 1860. Spring 2012. David Howlett.
Christianity is one of the most dynamic and diverse cultural forms in the contemporary United States. Starting with the American Civil War, follows those groups who self-identify as Christians in America up to the present date. Focuses on popular movements, theological and social conflicts, and changing devotional practices, as well as analyzes how Christianity is refracted differently through the lens of class, age, race, gender, and sexual orientation. A distanced but sympathetic engagement with the peoples who have transformed the United States through devotion to ever-changing forms of American Christianities.
[259c. Religious Toleration and Human Rights.]

## Courses of Instruction

271c - ESD. Spirit Come Down: Black Women and Religion. Spring 2012. Judith Casselberry.

Explores issues of self-representation, memory, material culture, embodiment, and civic and political engagement through autobiographical, historical, literary, anthropological, cinematic, and musical texts. Primarily focused on Christian denominations: Methodist, Baptist, and Pentecostal. Examines the religious lives of black women in nineteenth- and twentieth-century America. (Same as Africana Studies 271 and Gender and Women's Studies 270.)

275b - ESD. Comparative Mystical Traditions. Spring 2012. Jorunn Buckley.
Taking a clue from the Greek verb behind the term "mysticism," "to see inwardly" (muein), studies primary texts-some "classical," others less well known-with a specific focus on Jewish, Hellenistic, Christian, and Islamic materials. Avoiding "universal" ideas about mystical traditions, places mystical aspects within their specific religious traditions. Focuses on the language(s) of mysticism: how are mystical techniques, training regimens, and experiences expressed in their respective religious-cultural frameworks? Mysticism is seen as separate from modern "self-help" therapies and other ego-enhancing systems. Religious-political aspects of mysticism are treated, especially with respect to certain types of medieval European Christian mysticism.

278c. Sacred Journeys, Holy Shrines: Pilgrimage in World Religions. Spring 2012. David Howlett.

Surveys pilgrimage practices in major world religions and new religious movements. Analyzes how pilgrimage intersects with questions of national identity, religious orthodoxy and heterodoxy, "the secular," and popular culture. From resistance to British colonialism by pilgrims at the Kumbh Mela in Allahabad to practices of "secular pilgrimage" at the Paris tomb of Jim Morrison, case studies reflect the diverse ways that humans engage travel, shrines, and constructions of the sacred.

289c - IP. Construction of the Goddess and Deification of Women in Hindu Religious Tradition. Fall 2011. Sree Padma Holt.

Focuses include (1) an examination of the manner in which the power of the feminine has been expressed mythologically and theologically in Hinduism; (2) how various categories of goddesses can be seen or not as the forms of the "great goddess"; and (3) how Hindu women have been deified, a process that implicates the relationship between the goddess and women. Students read a range of works, primary sources, biographies and myths of deified women, and recent scholarship on goddesses and deified women. (Same as Asian Studies 289 and Gender and Women's Studies 289.)

291c-294c. Intermediate Independent Study in Religion. The Department.

## Advanced Courses

The following courses study in depth a topic of limited scope but major importance, such as one or two individuals, a movement, type, concept, problem, historical period, or theme. Topics change from time to time. Religion 390 is required for majors, and normally presupposes that four of nine required courses have been taken.

## [333c. Islam and Science.]

344c. Religious Culture and Politics in Southeast Asia. Spring 2012. John Holt.
An examination and discussion of the ways in which changes in political economy and society have fostered fundamental changes in the religious cultures of modern Southeast Asia.

Questions include: How have conceptions of power embedded in the traditional Buddhist concepts of the mandala and kingship been sustained or contested in contemporary Thai, Burmese, Lao, and Khmer politics? How have contemporary machinations of governments in Burma, Thailand, Laos, and Cambodia contributed to transformations in religious culture? How have religious ideas and practices abetted resistance to state hegemony in the highland communities of Burma, Laos, and Thailand? How are the deaths of war combatants and civilians remembered and commemorated in Vietnam and Cambodia? (Same as Asian Studies 344 and Government 393.)

390c. Theories about Religion. Fall 2011. John Holt.
Seminar focused on how religion has been explained and interpreted from a variety of intellectual and academic perspectives from the sixteenth century to the present. In addition to a historical overview of religion's interpretation and explanation, the focus also includes consideration of postmodern critiques and the problem of religion and violence in the contemporary world.

Prerequisite: Religion 101.
401c-404c. Advanced Independent Study and Honors in Religion. The Department.

## Romance Languages

Arielle Saiber, Department Cbair<br>Kate Flaherty, Department Coordinator

Professor: William C. VanderWolk<br>Associate Professors: Elena Cueto-Asín, Charlotte Daniels, Katherine Dauge-Roth, Gustavo Faverón-Patriau, Arielle Saiber, Hanétha Vété-Congolot, Enrique Yepes<br>Assistant Professor: Nadia V. Celis<br>Lecturers: Davida Gavioli, Anna Rein, Eugenia Wheelwright<br>Visiting Faculy: María Báez Marco, Isabelle Choquet, Jay Ketner, Esmeralda A. Ulloa, Carolyn Wolfenzon<br>Teaching Fellows: Tristan Bayard-Massot, Felipe Castañeda, Caroline Denogot

The Department of Romance Languages 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.

## Courses of Instruction

## Independent Study

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

## Honors in Romance Languages

Majors may elect to write an honors project in the department. This involves two semesters of independent study in the senior year and the writing of an honors essay and its defense before a committee of members of the department. Candidates for departmental honors must have an outstanding record in other courses in the department.

## Requirements for Majors in the Department of Romance Languages

Students may declare a major in French or in Spanish or in Romance languages (with courses in 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 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 204 or Spanish 204.* Students must achieve a grade of C or higher in all prerequisite courses.

All majors in Spanish, French, and Romance languages will complete at least three 300-level courses. 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.

## French Major Requirements

Nine courses higher than French 204*, including:

1. At least two of the following five courses: French 207 (same as Africana Studies 207 and Latin American Studies 206) or 208 or the equivalent in study abroad; and French 209, 210, or 211, or the equivalent in study abroad.
2. Three courses at the 300 level, including French 351 (senior seminar). At least two 300 -level courses must be taken at Bowdoin.
3. Students are strongly encouraged to include courses dealing with all periods and several Francophone contexts.

* or eight courses bigher than 204 for students beginning in 101, 102, or 203.


## Spanish Major Requirements

Nine courses higher than Spanish 204*:

## 1. Spanish 205 (same as Latin American Studies 205), 209 (same as Latin American

 Studies 209), and 210 (same as Latin American Studies 210).2. Three courses at the 300 level-at least two 300 -level courses must be taken at Bowdoin.
3. Students are strongly encouraged to include courses dealing with all periods and several Spanish-speaking contexts.

* or eight courses higher than 204 for students beginning in 101, 102, or 203.


## Romance Languages Major Requirements

Nine courses higher than 204 in at least two languages, including the corresponding requirements below:

1. French 207 (same as Africana Studies 207 and Latin American Studies 206) or 208 and 209,210 , or 211 , or the equivalent in study abroad
2. Italian 205 and 208 or the equivalent in study abroad, if combining Spanish or French with Italian
3. Spanish 209 (same as Latin American Studies 209) and 210 (same as Latin American Studies 210), or the equivalent in study abroad
4. Three courses at the 300 level. At least two 300 -level courses must be taken at Bowdoin.*

* Students whose major focus is French will take French 351 (senior seminar) as one of the 300-level courses.


## Requirements for Minors in Romance Languages

Students may declare a minor in French, Italian, or Spanish. The minor consists of at least three courses at Bowdoin in one language higher than 204, including one 300 -level course. The Italian minor may include one 200-level course from abroad; the 300 -level course must be taken at Bowdoin. Courses taken abroad do not count for the French or Spanish 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.

## French

## Introductory, Intermediate, and Advanced Courses

## 101c. Elementary French I. Every fall. Fall 2011. Jay Ketner.

A study of the basic forms, structures, and vocabulary. Emphasis on listening comprehension and spoken French. Three class hours per week and one weekly conversation session with assistant, plus regular language laboratory assignments. Primarily open to first- and second-year students who have had two years or less of high school French. A limited number of spaces are available for juniors and seniors.

102c. Elementary French II. Every spring. Spring 2012. Isabelle Choquet.
A continuation of French 101. A study of the basic forms, structures, and vocabulary. Emphasis on listening comprehension and spoken French. During the second semester, more stress is placed on reading and writing. Three class hours per week and one weekly conversation session with assistant, plus regular language laboratory assignments.

Prerequisite: French 101 or the equivalent.

## Courses of Instruction

203c. Intermediate French I. Every fall. Fall 2011. Isabelle Choquet and Katherine DaugeRoth.

A review of basic grammar, which is integrated into more complex patterns of written and spoken French. Short compositions and class discussions require active use of students' acquired knowledge of French. Three class hours per week and one weekly conversation session with teaching fellow.

Prerequisite: French 102 or placement.
204c. Intermediate French II. Every spring. Spring 2012. Charlotte Daniels and Jay Ketner.
Continued development of oral and written skills; course focus shifts from grammar to reading. Short readings from French literature, magazines, and newspapers form the basis for the expansion of vocabulary and analytical skills. Active use of French in class discussions and conversation sessions with French assistants. Three class hours per week and one weekly conversation session with teaching fellow.
Prerequisite: French 203 or placement.
205c. Advanced French I. Every fall. Fall 2011. Charlotte Daniels and William VanderWolk.
Conversation and composition based on a variety of contemporary films and texts about France and Francophone countries. Grammar review and frequent short papers. Emphasis on student participation including short presentations and debates. Three hours per week plus one weekly viewing session for films and weekly conversation session with teaching fellow.

Prerequisite: French 204 or placement.
207c - ESD, IP. Francophone Cultures. Every fall. Fall 2011. Isabelle Choquet.
An introduction to the cultures of various French-speaking regions outside of France. Examines the history, politics, customs, cinema, literature, and the arts of the Francophone world, principally Africa and the Caribbean. Conducted in French. (Same as Africana Studies 207 and Latin American Studies 206.)

Prerequisite: French 205 or higher, or permission of the instructor.
208c - ESD, IP. Contemporary France through the Media. Every spring. Spring 2012. Charlotte Daniels and Katherine Dauge-Roth.

An introduction to contemporary France through newspapers, magazines, television, music, and film. Emphasis is on enhancing communicative proficiency in French and increasing cultural understanding prior to study abroad in France or another Francophone country. Conducted in French.

Prerequisite: French 205 or higher, or permission of the instructor.
209c - IP. Introduction to the Study and Criticism of Medieval and Early Modern French Literature. Every fall. Fall 2011. Katherine Dauge-Roth.

An introduction to the literary tradition of France from the Middle Ages to the French Revolution. Students are introduced to major authors and literary movements in their cultural and historical contexts. Conducted in French.

Prerequisite: French 205 or higher, or permission of the instructor.

210c - IP. Introduction to the Study and Criticism of Modern French Literature. Every spring. Spring 2012. William VanderWolk.

Introduces students to the literary tradition of the French-speaking world from 1789 to the present. Focus on major authors and literary movements in historical and cultural context. Conducted in French.

Prerequisite: French 205 or higher, or permission of the instructor.
211c - ESD, IP. Introduction to the Study and Criticism of Francophone Literature. Every spring. Hanétha Vété-Congolo.

Introduces students to the literary tradition of the contemporary Francophone world. Focuses on major authors and literary movements in historical and cultural context. Conducted in French. (Same as Africana Studies 209 and Latin American Studies 213.)
Prerequisite: French 205 or higher, or permission of the instructor.
309-329. Topics in French and Francophone Literature. Every year. The Department.
Designed to provide students who have a basic knowledge of literature in French the opportunity to study more closely an author, a genre, or a period. Conducted in French.

312c. Urban Fictions in Québec Literature: The City as a Space of (Quiet) Revolution. Fall 2011. Jay Ketner.

A study of writing identity and the city in Québec novels from the 1960s to the present, considering Montréal as a primary site of foundational cultural and social transformations that continue to engender, through writing, new social possibilities and configurations. Related issues to be examined include how authors write cultural, political, and gender identity; questions of nationalism; marginalization; and the city and text as places for both understanding and imagining a nation. Authors studied may include Gabrielle Roy, Hubert Aquin, Monique LaRue, Jacques Godbout, Nicole Brossard, and Carole David.

Prerequisite: Two of the following: French 207 (same as Africana Studies 207 and Latin American Studies 206) or 208; French 209, 210, or 211; one 300-level course in French; or permission of the instructor.
316c. French Theater Production. Fall 2011. Charlotte Daniels.
Students read, analyze, and produce scenes from French plays. At the end of the semester, student groups produce, direct, and perform in one-act plays. Authors studied may include Molière, Marivaux, Beckett, Ionesco, Sartre, Camus, Genet, Sarraute, and Anouilh. Conducted in French.

Prerequisite: Two of the following: French 207 (same as Africana Studies 207 and Latin American Studies 206) or 208; French 209, 210, or 211; one 300 -level course in French; or permission of the instructor.
[318c. Novel Ways to Love and Die in France.]
[321c. Resistance, Revolt, and Revolution.]
[326c. Body Language: Writing Corporeality in Early Modern France.]
[327c. Love, Letters, and Lies.]

351c. Senior Seminar for French Majors. Every spring. Spring 2012. Katherine Dauge-Roth. Theme-based seminar for senior majors. This course is required for the major in French or Romance languages.
401c-404c. Independent Study and Honors in French. The Department.

## Italian

101c. Elementary Italian I. Every fall. Fall 2011. Davida Gavioli and Arielle Saiber.
Three class hours per week, plus weekly drill sessions and language laboratory assignments. Study of the basic forms, structures, and vocabulary. Emphasis is on listening comprehension and spoken Italian.

102c. Elementary Italian II. Every spring. Spring 2012. Anna Rein and Arielle Saiber.
Continuation of Italian 101. Three class hours per week, plus weekly drill sessions and language laboratory assignments. Study of the basic forms, structures, and vocabulary. More attention is paid to reading and writing.

Prerequisite: Italian $\mathbf{1 0 1}$ or the equivalent.
203c. Intermediate Italian I. Every fall. Fall 2011. Anna Rein.
Three class hours per week and one weekly conversation session with assistant. Aims to increase fluency in both spoken and written Italian. Grammar fundamentals are reviewed. Class conversation and written assignments are based on contemporary texts of literary and social interest.

Prerequisite: Italian 102 or placement.
204c. Intermediate Italian II. Every spring. Spring 2012. Davida Gavioli.
Three class hours per week and one weekly conversation session with assistant. Aims to increase fluency in both spoken and written Italian. Grammar fundamentals are reviewed. Class conversation and written assignments are based on contemporary texts of literary and social interest.

Prerequisite: Italian 203 or placement.
205c. Advanced Italian I. Every fall. Fall 2011. Arielle Saiber.
Strengthens fluency in reading, writing, and speaking through an introduction to contemporary Italian society and culture. An advanced grammar review is paired with a variety of journalistic and literary texts, visual media, and a novel. Conducted in Italian.
Prerequisite: Italian 204 or placement.
208c - IP. Introduction to Contemporary Italy: Dalla Marcia alla Vespa. Spring 2012.
Davida Gavioli.
In the recent past, Italy has experienced violent political, economic, and cultural changes. In short succession, it experienced Fascist dictatorship, the Second World War, the Holocaust, and Civil War, a passage from Monarchy to Republic, a transformation from a peasant existence to an industrialized society, giving rise to a revolution in cinema, fashion, and transportation. How did all this happen? Who were the people behind these events? What effect did they have on everyday life? Answers these questions, exploring the history and the culture of Italy from Fascism to contemporary Italy, passing through the economic boom, the "Years of Lead," and the Mafia. Students have the opportunity to "relive" the events of the twentieth
century, assuming the identity of real-life men and women. Along with historical and cultural information, students read newspaper articles, letters, excerpts from novels and short stories from authors such as Calvino, Levi, Ginzburg, and others, and see films by directors like Scola, Taviani, De Sica, and Giordana.
Prerequisite: Italian 205 or permission of the instructor.

## [222c. Dante's Divine Comedy.]

[308c. Of Gods, Dons, and Leopards: Literary Representations of Sicily between Reality and Metaphor.]
[309c. Introduction to the Study and Criticism of Medieval and Early Modern Italian Literature.]
[311c. "Now a Major Motion Picture!": Cinema and Modern Literature in Italy.]

## [314c. Renaissance Italian Theater.]

318c. From Rimini to Gomorra: Times of Renewal in Contemporary Italian Literature. Fall 2011. Davida Gavioli.

The "new Italian narrative" that began to be spoken about in the '80s and then developed over the following decades was not associated with a single writer or movement but with an eclectic and varied production. Examines the emergence of new genres such as noir, pulp, migrant writing, and the new Italian epic and the ethical, aesthetic, and social issues that underlie them. Authors studied include Tondelli, Tabucchi, Camilleri, Saviano, Lucarelli, Campo, Ammaniti.

Prerequisite: Italian 208 or permission of the instructor.
320c. Dante's Commedia. Spring 2012. Arielle Saiber.
One of the greatest works of literature of all times. Dante's Divine Comedy leads us through the torture-pits of Hell, up the steep mountain of Purgatory, to the virtual, white-on-white zone of Paradise, and then back to where we began: our own earthly lives. Accompanies Dante on his allegorical journey, armed with knowledge of Italian culture, philosophy, politics, religion, and history. Pieces together a mosaic of medieval Italy, while developing and refining abilities to read, analyze, interpret, discuss, and write about both literary texts and critical essays.

Prerequisite: Italian 208 or permission of the instructor.
401c-404c. Independent Study in Italian. The Department.

## Spanish

101c. Elementary Spanish I. Every fall. Fall 2011. Genie Wheelwright.
An introduction to the grammar of Spanish, aiming at comprehension, reading, writing, and simple conversation. Emphasis is on grammar structure, with frequent oral drills. Spanish 101 is primarily open to first- and second-year students, with a limited number of spaces available for juniors and seniors who have had less than one year of high school Spanish.

102c. Elementary Spanish II. Every spring. Spring 2012. Esmeralda Ulloa.
Three class hours per week and weekly conversation sessions with assistant, plus laboratory assignments. An introduction to the grammar of Spanish, aiming at comprehension, reading, writing, and simple conversation. More attention is paid to reading and writing.

Prerequisite: Spanish 101 or the equivalent.

## Courses of Instruction

## 203c. Intermediate Spanish I. Every fall. Fall 2011. María Báez Marco.

Three class hours per week and one weekly conversation session with the teaching assistant. Grammar fundamentals are reviewed. Class conversation and written assignments are based on readings in modern literature.

Prerequisite: Spanish 102 or placement.
204c. Intermediate Spanish II. Fall 2011. Esmeralda Ulloa. Spring 2012. Marco Genie Wheelwright.

Three class hours per week and one weekly conversation session with the assistant. Grammar fundamentals are reviewed. Class conversation and written assignments are based on readings in modern literature.

Prerequisite: Spanish 203 or placement.
205c. Advanced Spanish. Every semester. Fall 2011. Nadia Celis, Elena Cueto-Asín, and Enrique Yepes. Spring 2012. Carolyn Wolfenzon.

The study of a variety of texts and media, together with an advanced grammar review, designed to increase written and oral proficiency, as well as appreciation of the cultural history of the Spanish-speaking world. Foundational course for the major. Three class hours per week and one weekly conversation session with assistant. (Same as Latin American Studies 205.)

Prerequisite: Spanish 204 or placement.
209c - IP. Introduction to Hispanic Studies: Poetry and Theater. Every semester. Fall 2011. Gustavo Faverón-Patriau. Spring 2012. Gustavo Faverón-Patriau and Enrique Yepes.

A chronological introduction to the cultural production of the Spanish-speaking world from pre-Columbian times to the present, with particular emphasis on the analysis of poetry and theater. Examines major literary works and movements in their historical and cultural context. One weekly workshop with assistant in addition to class time. Conducted in Spanish. (Same as Latin American Studies 209.)

Prerequisite: Spanish 205 (same as Latin American Studies 205) or permission of the instructor.

210c - IP. Introduction to Hispanic Studies: Essay and Narrative. Every semester. Fall 2011. Esmeralda Ulloa. Spring 2012. Nadia Celis and Elena Cueto-Asín.

A chronological introduction to the cultural production of the Spanish-speaking world from pre-Columbian times to the present, with particular emphasis on the analysis of essay and narrative. Examines major literary works and movements in their historical and cultural context. (Same as Latin American Studies 210.)

Prerequisite: Spanish 205 (same as Latin American Studies 205) or permission of the instructor.

301-309. Topics in Hispanic Cultures. Every year. The Department.
Designed to provide advanced students with an understanding of cultural developments and debates in specific regions of the Spanish-speaking world. Conducted in Spanish.

301c. Contemporary Spain: Diversity, Tradition, Change. Fall 2011. Elena Cueto-Asín.
A study of contemporary Spain through the analysis of a wide array of texts (essay, press, film, advertisement, music, etc.), aimed at understanding the complexities of a society and culture
as determined by geographical, linguistic, and ethnic diversity, and by forces of history and tradition vis-à-vis modernity and political change. Conducted in Spanish.
Prerequisite: Spanish 209 (same as Latin American Studies 209) or 210 (same as Latin American Studies 210).
[302c. The Idea of Latin America. (Same as Latin American Studies 302.)]
[303c. Conquest and Resistance in Latin America. (Same as Latin American Studies 303.)]
304c. Dress and Body Politics in Latin America. Spring 2012. Esmeralda Illloa.
Examines the significant role of the dressed body (both attire and the body itself) in the configuration of political discourse and national identity in Latin America. Focuses on verbal and visual representations of iconic figures such as Simón Bolívar, Pancho Villa, Rigoberta Menchú, and Evo Morales, among others. The connection of these often contradictory images to governance and collective identities is explored in various contexts from the colonial period to the present. Conducted in Spanish. (Same as Latin American Studies 304.)
Prerequisite: Spanish 209 (same as Latin American Studies 209) or 210 (same as Latin American Studies 210).

310-349. Topics in Hispanic Literary and Cultural Studies. Every year. The Department.
Designed to provide advanced students with the opportunity to deepen the study of specific aspects of the cultural production from the Spanish-speaking world with particular emphasis on literary analysis. Conducted in Spanish.

## 318c. A Journey around Macondo: García Márquez and His Contemporaries. Spring 2012. Nadia Celis.

Studies the main topics, techniques, and contributions of Colombian Nobel Prize winner Gabriel García Márquez as presented in One Hundred Years of Solitude. Explores the actual locations, social, and cultural trends that inspired the creation of Macondo, the so-called "village of the world" where the novel takes place, and the universal themes to which this imaginary town relates. His work is read in connection with other contemporary writers who were part of the intellectual climate in which the novel was written, such as José Félix Fuenmayor, Álvaro Cepeda Samudio, and Héctor Rojas Herazo. (Same as Latin American Studies 318.)
Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.

320c. Beyond the Postcard: The Hispanic Caribbean. Fall 2011. Nadia Celis.
Explores the historical trends that have shaped Hispanic Caribbean societies through a panoramic study of twentieth-century fiction, film, and popular music by authors from the Greater Caribbean and U.S.-Latinos of Caribbean descent. Topics include colonialism, slavery and the plantation economy, imperialism, dictatorships, tourism, migrations, and collective identities. Authors include García Márquez, Santos-Febres, Barnet, Piñera, and Junot Díaz. (Same as Africana Studies 320 and Latin American Studies 320. )
Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.

## [328c. Don Quijote.]

[332c. Poetry and Social Activism in Latin America. (Same as Latin American Studies 332.)]

## 337c. Hispanic Short Story. Fall 2011. Gustavo Faverón-Patriau.

An investigation of the short story as a literary genre, beginning in the nineteenth century, involving discussion of its aesthetics, as well as its political, social, and cultural ramifications in the Spanish-speaking world. Authors include Pardo Bazán, Echevarría, Borges, Cortázar, García Márquez, Ferré, and others. (Same as Latin American Studies 337.)

Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.
[339c. Borges and the Borgesian. (Same as Latin American Studies 339.)]
[341c. Colonial Experience and Post-colonial Perspectives. (Same as Latin American Studies 341.)]
[343c. Imaginary Cities/Real Cities in Latin America. (Same as Latin American Studies 343.)]

345c. Ecological Thought in Latin American Literature. Fall 2011. Enrique Yepes.
Explores how the radical interconnectedness postulated by ecological thinking can be read in Latin American narrative, essay, film, and poetry from the 1920 s to the present. Includes a review of cultural ecology as well as an overview of environmental history and activism in the region. (Same as Environmental Studies 285 and Latin American Studies 345.)
Prerequisite: Two of the following: Spanish 209 (same as Latin American Studies 209), 210 (same as Latin American Studies 210), 310 or higher; or permission of the instructor.
[348c. The Others: The Nineteenth-Century Latin American Novel. (Same as Latin American Studies 348.)]

401c-404c. Independent Study and Honors in Spanish. The Department.

## RUSSIAN

Raymond H. Miller, Department Cbair
Kate Flaherty, Department Coordinator
Professor: Jane E. Knox-Voina**
Associate Professor: Raymond H. Miller

## Requirements for the Major in Russian Language and Literature

The Russian major consists of ten courses (eleven for honors). These include Russian 101, 102, 203, and 204; four courses in Russian higher than Russian 204; and two approved courses in either Russian literature in translation or Slavic civilization, or approved related courses in government, history, or economics (e.g., History 218, The History of Russia, 1825-1936).

## Interdisciplinary Major

The department participates in an interdisciplinary major in Eurasian and East European studies. See pages 199-201.

## Study Abroad

Students are encouraged to spend at least one semester in Russia. There are several approved summer and one-semester Russian-language programs in Moscow, St. Petersburg, Voronezh, and Irkutsk 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.

## 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 200-level courses: Russian 220-251.

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.

# 22c. "It Happens Rarely, Maybe, but It Does Happen"-Fantasy and Satire in East Central Europe. Every other fall. Fall 2012. Raymond Miller. 

## Courses in Russian for Majors and Minors

101c. Elementary Russian I. Every fall. Fall 2011. Jane Knox-Voina.
Emphasis on the acquisition of language skills through imitation and repetition of basic language patterns; multimedia material (seeing and making short film clips); the development of facility in speaking through interactive dialogues and understanding simple Russian.
Conversation hour with native speaker.
102c. Elementary Russian II. Spring 2012. The Department.
Continuation of Russian 101. Emphasis on the acquisition of language skills through imitation and repetition of basic language patterns; multimedia material (seeing and making short film clips); the development of facility in speaking through interactive dialogues and understanding simple Russian. Conversation hour with native speaker.

Prerequisite: Russian 101 or permission of the instructor.

## Courses of Instruction

203c. Intermediate Russian I. Every fall. Fall 2011. Raymond Miller.
A continuation of Russian 101, 102. Emphasis on maintaining and improving the student's facility in speaking and understanding normal conversational Russian. Writing and reading skills are also stressed. Conversation hour with native speaker.
Prerequisite: Russian 102 or permission of the instructor.
204c. Intermediate Russian II. Spring 2012. Raymond Miller.
A continuation of Russian 203. Emphasis on maintaining and improving the student's facility in speaking and understanding normal conversational Russian. Writing and reading skills are also stressed. Conversation hour with native speaker.

Prerequisite: Russian 203 or permission of the instructor.
291c-294c. Intermediate Independent Study in Russian. The Department.
Upon demand, this course may be conducted as a small seminar for several students in areas not covered in the above courses (e.g., the Russian media or intensive language study).

Prerequisite: Russian 305 or permission of the instructor.
305c. Advanced Reading and Composition in Russian. Every fall. Fall 2011. Raymond Miller.

Intended to develop the ability to read Russian at a sophisticated level by combining selected language and literature readings, grammar review, and study of Russian word formation. Discussion and reports in Russian. Conversation hour with native speaker.

Prerequisite: Russian 204 or permission of the instructor.
307c. Russian Folk Culture. Every other year. Spring 2012. Raymond Miller.
A study of Russian folk culture: folk tales, fairy tales, legends, and traditional oral verse, as well as the development of folk motives in the work of modern writers. Special emphasis on IndoEuropean and Common Slavic background. Reading and discussion in Russian. Short papers.
Prerequisite: Russian 305 or permission of the instructor.
309c. Nineteenth-Century Russian Literature. Fall 2012. Raymond Miller.
A survey of Russian prose of the nineteenth century. Special attention paid to the development of Russian realism. Writers include Pushkin, Lermontov, Gogol', Turgenev, Dostoevsky, and Tolstoy.

Prerequisite: Russian 305 or permission of the instructor.
310c. Modern Russian Literature. Every other spring. Spring 2013. The Department.
An introduction to twentieth-century Russian literature from Symbolism to Postmodernism. Reading of poetry by Blok, Akhmatova, Mayakovsky, Evtushenko, and Okudzhava, along with short prose by Zamiatin, Babel, Zoshchenko, Kharms, Shalamov, Aksenov, Shukshin, Petrushevskaya, Tolstaya, Ulitskaya, Sadur, and Pelevin. Close readings of the assigned works are viewed alongside other artistic texts and cultural phenomena, including the bard song, film, conceptual and sots-art, and rock- and pop-music.

Prerequisite: Russian $\mathbf{3 0 5}$ or permission of the instructor.

316c. Russian Poetry. Fall 2011. Jane Knox-Voina.
Examines various nineteenth- and twentieth-century Russian poets, including Pushkin, Lermontov, Blok, and Mayakovsky. Earlier history of Russian verse is also discussed. Includes study of Russian poetics and the cultural-historical context of each poet's work. Reading and discussion are in Russian. Short papers.

Prerequisite: Russian 305, or permission of the instructor.
401c-404c. Advanced Independent Study and Honors in Russian. The Department.
Individual research in Russian studies. Major sources should be read in Russian. A twosemester project is necessary for honors in Russian.

Prerequisite: One course in Russian higher than 305 and permission of the instructor.

## In English Translation

220c - IP. Nineteenth-Century Russian Literature. Every other fall. Fall 2011. Raymond Miller.

Traces the development of Russian realism and the Russian novel in the context of contemporary intellectual history. Specific topics include the Russian response to Romanticism; the rejection of Romanticism in favor of the "realistic" exposure of Russia's social ills; Russian nationalism and literary Orientalism; the portrayal of women and their role in Russian society; the reflection of contemporary political controversies in Russian writing. Authors include Pushkin, Gogol', Lermontov, Belinsky, Turgenev, Dostoevsky, and Tolstoy. Russian majors are required to do some reading in Russian.

## 221c - IP, VPA. Soviet Worker Bees, Revolution, and Red Love in Russian Film. Fall

 2012. The Department.Explores twentieth-century Russian society through critical analysis of film, art, architecture, music, and literature. Topics include scientific utopias, eternal revolution, individual freedom versus collectivism, conflict between the intelligentsia and the common man, the "new Soviet woman," nationalism, the thaw and double think, stagnation of the 1970s, post-glasnost sexual liberation, and black hole post-soviet film. Works of Eisenstein, Vertov, Pudovkin, Tarkovsky, Kandinsky, Chagall, Mayakovsky, Bulgakov, Pasternak, Brodsky, Akhmatova, Solzhenitsyn, Petrushevskaya, and Tolstaya. Weekly film viewings. Russian majors are required to do some reading in Russian. (Same as Gender and Women's Studies 220.)

Note: May be counted towards a minor in film studies.
223c. Dostoevsky and the Novel. Spring 2013. Raymond Miller.
Examines Fyodor Dostoevsky's later novels. Studies the author's unique brand of realism ("fantastic realism," "realism of a higher order"), which explores the depths of human psychology and spirituality. Emphasis on the anti-Western, anti-materialist bias of Dostoevsky's quest for meaning in a world growing increasingly unstable, violent, and cynical. Special attention is given to the author's treatment of urban poverty and the place of women in Russian society. (Same as Gender and Women's Studies 221.)

224c. Dostoevsky or Tolstoy. Every other spring. Spring 2012. Raymond Miller.
Explores and compares two giants of Russian literature, Lev Tolstoy and Fyodor Dostoevsky. Their works are read for their significance, both to Russian cultural history and to European thought; special attention is paid to the portrayal of women and women's issues by both

## Courses of Instruction

authors. Part I studies Dostoevsky's quest for guiding principles of freedom and love in a world of growing violence, cynicism, and chaos. "The Woman Question" emerges as a constant subject: Dostoevsky particularly concerned himself with the suffering of poor and humiliated women. A close reading of several short works and the novel Brothers Karamazov set in their historical and intellectual framework. Emphasis on the novelist's struggle between Western materialistic individualism and Eastern voluntary self-renunciation. Examines Dostoevsky's "fantastic realism" as a polyphony of voices, archetypes, and religious symbols. Part II studies Tolstoy's development both as a novelist and a moral philosopher. Examines several works, the most important being the novel Anna Karenina, with special emphasis on the tension between Tolstoy-the-artist and Tolstoy-the-moralist. Discussion of the writer's role as "the conscience of Russia" in the last thirty years of his life, as well as his influence on such figures as Gandhi and Martin Luther King. (Same as Gender and Women's Studies 217.)
251c - IP, VPA. Russia's "Others": North Caucasus, Siberia, and Central Asia through Film and Literature. Spring 2013. The Department.
Films, music, short stories, folklore, and art are analyzed for the construction of national identity of Asian peoples from the Caucasus to the Siberian Bering Straits-Russia and the Former Central Asia (the "stans" and Mongolia). Themes: Multicultural conflicts along the Silk Road, the transit zone linking West to East. Changing roles of Asian women as cornerstone for nations. Survival and role of indigenous peoples in solving cultural, economic, and geopolitical issues facing the twenty-first century. Arrival of "outsiders": from early traders and Siberian settlers to exiled convicts; from early conquerors to despotic Bolshevik rulers, from Genghis Khan to Stalin. Impact of Soviet collectivization, industrialization, and modernism on traditional beliefs, the environment, subsistence indigenous cultures, and Eastern spiritualities (Islam, shamanism). Questions how film and literature both tell and shape the story of "nations." Films include S. Bodrov's Prisoner of the Mountains (Caucasus) and Mongot; V. Pudovskin's Storm Over Asia, A. Kurosawa's Dersu Uzala, N. Mikhalkov's Close to Eden, A. Konchalovsky's Siberiade, G. Omarova's Schizo. (Same as Gender and Women's Studies 243.)

Note: May be counted towards a minor in film studies.

## Sogiology and Anthropology

## Scott MacEachern, Department Chair

Lori B. Quimby, Department Coordinator

Professors: Susan E. Bellt, Sara A. Dickey, Scott MacEachern, Craig A. McEwen**, Nancy E. Riley<br>Associate Professors: Susan A. Kaplant, Krista E. Van Vleet<br>Assistant Professors: Kelly Fayard, Dhiraj Murthyt, Ingrid A. Nelson<br>Visiting Faculy: Wendy Christensen, Benjamin Moodie, H. Roy Partridge Jr., Maria Elena<br>Rivera-Beckstrom

## 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 preprofessional programs such as law and medicine. It also provides background preparation for careers in urban planning, public policy, the civil service, social work, business or personnel administration, social research, law enforcement and criminal justice, the health professions, journalism, secondary school teaching, and 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 101, 201, 211, and 310. 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 201 should be taken in the sophomore year.
The major in antbropology consists of nine courses, including Anthropology 101, 102, 201, 203, and 310, and one course with an area focus. Students are urged to complete Anthropology 101, 102, 201, and 203 as early as possible. One or two of the nine 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 seven of the courses counted toward the major must be Bowdoin anthropology courses.

## Requirements for the Minor

The minor in sociology consists of five sociology courses, including Sociology 101, 201, and 211, and two other sociology courses. One of the elective courses may be from off-campus study.
The minor in antbropology consists of five anthropology courses, including Anthropology 101 and 203, either 102 or 201, and an area study course. One of the elective courses may be from off-campus study.
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.

## Core Courses

The core courses in sociology ( $\mathbf{1 0 1}, \mathbf{2 0 1}, \mathbf{2 1 1}$, and 310) and the core courses in anthropology (101, 102, 201, 203, and 310) must be taken at Bowdoin. Courses that will count toward the major or minor must be taken on a graded basis (not Credit/D/Fail). 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.

## 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 201 or Anthropology 201 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.

## Sociology

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
10b. Racism. Fall 2011. Spring 2012. Roy Partridge. (Same as Africana Studies 10.)
[22b. In the Facebook Age.]

## Introductory, Intermediate, and Advanced Courses

101b. Introduction to Sociology. Fall 2011. Nancy Riley and Maria Elena Rivera-Beckstrom. Spring 2012. Wendy Christensen.
The major perspectives of sociology. Application of the scientific method to sociological theory and to current social issues. Theories ranging from social determinism to free will are considered, including the work of Marx, Weber, Durkheim, Merton, and others. Attention is given to such concepts as role, status, society, culture, institution, personality, social organization, the dynamics of change, the social roots of behavior and attitudes, social control, deviance, socialization, and the dialectical relationship between individual and society.
201b. Introduction to Social Research. Spring 2012. Ingrid Nelson.
Provides firsthand experience with the specific procedures through which social science knowledge is developed. Emphasizes the interaction between theory and research, and examines the ethics of social research and the uses and abuses of research in policy making. Reading and methodological analysis of a variety of case studies from the sociological literature. Field and laboratory exercises that include observation, interviewing, use of available data (e.g., historical documents, statistical archives, computerized data banks, cultural artifacts), sampling, coding, use of computer, elementary data analysis and interpretation. Lectures, laboratory sessions, and small-group conferences.
Prerequisite: Sociology 101 or permission of the instructor.

## [206b - ESD. Sociology of Education.]

## 208b. Race and Ethnicity. Spring 2012. Ingrid Nelson.

The social and cultural meaning of race and ethnicity, with emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons among racial and ethnic minorities in the United States. (Same as Africana Studies 208.)
Prerequisite: Sociology 101, Africana Studies 101, or Anthropology 101, or permission of the instructor.

210b. Politics, Power, and Society. Fall 2011. Maria Elena P. Rivera-Beckstrom.
Explores politics from a sociological perspective that emphasizes the role of power, ideology, and culture. Provides tools to understand political behavior, institutions, and events in social contexts such as class, nationality, and race. Gives particular attention to processes that bring about social-political and economic changes such as nationalism and the founding of nation-
states, revolutions, de/colonization, and globalization. Explores case studies from Asia, Africa, and Western Europe.

Prerequisite: Sociology 101 or Anthropology 101.
211b. Classics of Sociological Theory. Fall 2011. Wendy Christensen.
An analysis of selected works by the founders of modern sociology. Particular emphasis is given to understanding differing approaches to sociological analysis through detailed textual interpretation. Works by Marx, Weber, Durkheim, and selected others are read.

Prerequisite: Sociology 101 or permission of the instructor.
[214b. Critical Theory and New Media.]
215b. Criminology and Criminal Justice. Fall 2011. Craig McEwen.
Focuses on crime and corrections in the United States, with some cross-national comparisons. Examines the problematic character of the definition of "crime." Explores empirical research on the character, distribution, and correlates of criminal behavior, and interprets this research in the light of social structural, cultural, and social psychological theories of crime causation. Discusses the implications of the nature and causes of crime for law enforcement and the administration of justice. Surveys the varied ways in which prisons and correctional programs are organized and assesses research about their effectiveness.

Prerequisite: Sociology 101 or Anthropology 101, or permission of the instructor.
[216b - ESD. Food, Culture, and Society. (Same as Latin American Studies 216.)]
[218b. Sociology of Law.]
219b - ESD. Sociology of Gender. Fall 2011. Wendy Christensen.
Our ideas about gender-about women, men, masculinity, femininity-organize our social life in important ways that we often do not even notice. Critically examines the ways gender informs the social world in which we live and how beliefs about gender create and enforce a system of gender difference and inequality. Examines how gender is involved in and related to differences and inequalities in social roles, gender identity, sexual orientation, and social constructions of knowledge. Particular attention paid to exposing the gendered workings of institutions such as the family and the workplace, the link between gender and sexuality, and how race and class inform our ideas about gender. (Same as Gender and Women's Studies 216.)

Prerequisite: Sociology 101 or Anthropology 101, or permission of the instructor.
[223b - ESD. Cultural Interpretations of Medicine. (Same as Gender and Women's Studies 223.)]
[224b - IP. Global Health Matters.]
226b - ESD. War and Media. Spring 2012. Wendy Christensen.
The role of the media is perhaps never more crucial or contentious than during times of war. Uses sociological communications theory to examine how the media shapes war, military conflicts, homeland security, patriotism, and the United States as an international superpower. Includes a history of U.S. news coverage of war and war in popular films (from World War I to the current wars in Iraq and Afghanistan). Particular attention paid to the military's use of the media to shape public opinion (propaganda posters and recruitment advertisements), and how new media technologies change the relationship between the media and the military. Takes an
intersectional approach to understanding the relationship between the media and the military, looking at how assumptions about class, gender, and race shape media coverage of war. Not open to students who have credit for Sociology 120.

Prerequisite: Sociology 101 or Anthropology 101.
[227b - IP. Transnational Race and Ethnicity. (Same as Africana Studies 227 and Asian Studies 263.)]
[229b - ESD. Sociology of the Family. (Same as Gender and Women's Studies 229.)]
230b - IP. National Cultures in the Modern World. Fall 2011. Benjamin Moodie.
Explores what "culture" means in the modern world. Emphasizes cultural comparisons, particularly between and within the United States, France, and Japan, as a way to illuminate how different cultures influence people's thinking about fundamental issues such as how the social world works or what it means to lead a good life. Considers what determines culture and what distinguishes it from non-cultural influences on action, and whether a nation can "have" a culture when individuals differ from one another so much. Is it possible to identify an American or French or Japanese way of thinking and behaving?
Prerequisite: Sociology 101 or Anthropology 101.
[236b - IP. South Asian Popular Culture. (Same as Asian Studies 233.)]
250b - ESD. Epidemiology: Principles and Practices. Spring 2012. Nancy Riley.
Introduces epidemiology, the study of the patterns and influences of disease (and health) in populations and communities. Focusing on the social, political, and economic influences and consequences of patterns of disease and death, considers how these patterns reflect and affect the demographics, social structure, economy, and culture of societies, and how societies mobilize to combat disease and promote health. Focuses particularly on the role of socioeconomic inequality-both within and between countries-in how diseases spread and are managed.

Prerequisite: Sociology 101 or Anthropology 101.
[253b - ESD. Constructions of the Body. (Same as Gay and Lesbian Studies 253 and Gender and Women's Studies 253.)]
[254b - ESD, IP. Gender and Sexuality in Latin America. (Same as Anthropology 254, Gender and Women's Studies 254, and Latin American Studies 257.)]
[255b - ESD. Gender and Politics. (Same as Gender and Women's Studies 255.)]
275b - ESD. Cultural Encounters with/in Hawaìi. Fall 2011. Nancy Riley.
Examines Hawai' i as a site of cultural encounter. Topics include the ways that Hawa' i's tourism industry is connected to constructions of and consumption of ethnic identities by those within and outside Hawai i; the ways historical and contemporary encounters between different ethnic groups (Hawai' ian, haole, Chinese, Japanese, Filipino, Pacific Islanders) have created the contemporary Hawai ian social landscape; and the relations between mainland United States and Hawai ian culture and politics, particularly the rising Hawai ian sovereignty movement. Draws from theories of ethnic tourism, race/ethnicity, and colonialism.

Prerequisite: Two previous courses in either sociology or anthropology.
291b-294b. Intermediate Independent Study in Sociology. The Department.

310b. Advanced Seminar: Current Controversies in Sociology. Spring 2012. Nancy Riley.
Draws together different theoretical and substantive issues in sociology in the United States, primarily since 1950. Discusses current controversies in the discipline, e.g., quantitative versus qualitative methodologies, micro versus macro perspectives, and pure versus applied work.

Prerequisite: Sociology 211 or permission of the instructor.
[312b. Resistance and Accommodation: Comparative Perspectives on Gender. (Same as Gay and Lesbian Studies 312 and Gender and Women's Studies 312.)]
[315b. Seeing Social Life.]
401b-404b. Advanced Independent Study and Honors in Sociology. The Department.

## Anthropology

## First-Year Seminars

For a full description of first-year seminars, see pages 141-51.
19b. Archaeology: Rethinking the Past. Fall 2011. Leslie Shaw.

## Introductory, Intermediate, and Advanced Courses

101b. Introduction to Cultural Anthropology. Fall 2011. The Department. Spring 2012. Kelly Fayard.

Cultural anthropology explores the diversities and commonalities of cultures and societies in an increasingly interconnected world. Introduces students to the significant issues, concepts, theories, and methods in cultural anthropology. Topics may include cultural relativism and ethnocentrism, fieldwork and ethics, symbolism, language, religion and ritual, political and economic systems, family and kinship, gender, class, ethnicity and race, nationalism and transnationalism, and ethnographic representation and validity.

102b. Introduction to World Prehistory. Spring 2012. Scott MacEachern.
An introduction to the discipline of archaeology and the studies of human biological and cultural evolution. Among the subjects covered are conflicting theories of human biological evolution, debates over the genetic and cultural bases of human behavior, the expansion of human populations into various ecosystems throughout the world, the domestication of plants and animals, the shift from nomadic to settled village life, and the rise of complex societies and the state.

201b. Anthropological Research. Fall 2011. Sara Dickey.
Anthropological research methods and perspectives are examined through classic and recent ethnography, statistics and computer literacy, and the student's own fieldwork experience. Topics include ethics, analytical and methodological techniques, the interpretation of data, and the use and misuse of anthropology.

Prerequisite: Anthropology 101.
202b. Essentials of Archaeology. Fall 2011. Scott MacEachern.
Introduces students to the methods and concepts that archaeologists use to explore the human past. Shows how concepts from natural science, history, and anthropology help archaeologists investigate past societies, reveal the form and function of ancient cultural remains, and draw

## Courses of Instruction

inferences about the nature and causes of change in human societies over time. Will include a significant fieldwork component, including excavations on campus.
Prerequisite: Anthropology 102, or Archaeology 101 or 102, or permission of the instructor. 203b. History of Anthropological Theory. Fall 2011. Krista Van Vleet.

An examination of the development of various theoretical approaches to the study of culture and society. Anthropology in the United States, Britain, and France is covered from the nineteenth century to the present. Among those considered are Morgan, Tylor, Durkheim, Boas, Malinowski, Mead, Geertz, and Lévi-Strauss.

Prerequisite: Anthropology 101.
213b. Fantastic Archaeology. Fall 2011. Scott MacEachern.
Chariots of the Gods. Refugees from Atlantis. Tomb raiders. Stargates. Archaeology occupies a curious place in the popular imagination, as an academic pursuit but also a highly romanticized - and often fictionalized-quest. Its involuntary association with strange theories and fraudulent hangers-on may thus not be too surprising. Students will examine a variety of the weird and wonderful ideas that inhabit the fringes of archaeology, and thus come to an understanding of what the discipline is through analysis of what it is not.

Prerequisite: Anthropology 101 or 102, or permission of the instructor.
[221b - ESD. The Rise of Civilization.]
[224b - ESD. Transnational Cosmologies: Andean Examples. (Same as Latin American Studies 223.)]

227c - ESD, VPA. Protest Music. Spring 2012. Judith Casselberry.
Focuses on the ways black people have experienced twentieth-century events. Examines social, economic, and political catalysts for processes of protest music production across genres including gospel, blues, folk, soul, funk, rock, reggae, and rap. Analysis of musical and extra-musical elements' style, form, production, lyrics, intent, reception, commodification, mass-media, and the Internet. Explores ways in which people experience, identify, and propose solutions to poverty, segregation, oppressive working conditions, incarceration, sexual exploitation, violence, and war. (Same as Africana Studies 228 and Music 227.)
[229b. Maya Archaeology and Ethnohistory. (Same as Latin American Studies 229.)]
[230b - ESD. Language, Identity, and Power.]
[231b. Native Peoples and Cultures of Arctic America. (Same as Environmental Studies 231.)]
[232b - ESD, IP. Indian Cinema and Society: Industries, Politics, and Audiences. (Same as Asian Studies 247.)]
[233b - ESD, IP. Peoples and Cultures of Africa. (Same as Africana Studies 233.)]
[237b - ESD, IP. Family, Gender, and Sexuality in Latin America. (Same as Gender and Women's Studies 237 and Latin American Studies 237.)]
238b - IP. Culture and Power in the Andes. Fall 2011. Krista Van Vleet.
Explores the anthropology and history of the Andes, focusing on questions of cultural transformation and continuity among Native Andeans. Examines ethnography, popular culture, and current events of Bolivia, Ecuador, and Peru. Topics include the Inca state and Spanish
colonization; Native Andean family and community life; subsistence economies; gender, class, and ethnic inequalities and social movements; domestic and state violence; religion; tourism; coca and cocaine production; and migration. (Same as Latin American Studies 238.)

Prerequisite: Anthropology 101 or permission of the instructor.
240b - ESD. Contemporary Issues of Native North America. Fall 2011. Kelly Fayard.
Explores contemporary issues within Native American communities to gain a better understanding of legal issues between tribal governments and the Federal government, reservations, and urban Indian populations. Analyzes issues facing contemporary Native American nations, including Indian gaming and casinos, federal recognition and sovereignty, blood quantum and biological race, religious freedom and sacred sites, mascots, and repatriation of human remains and important artifacts. Efforts to reclaim traditional languages, hunting grounds, and arts discussed.

Prerequisite: Anthropology 101.
[243b. Modernity in South Asia. (Same as Asian Studies 232.)]
245b - ESD, IP. We are Family: Anthropological Understandings of Kinship. Fall 2011. Kelly Fayard.

Anthropologists have long been fascinated with defining who is related to whom. Students read works by leading anthropologists to gain an understanding the various ways kinship has been defined in anthropology and in a diversity of cultures. Elucidates various kinship systems throughout the world and explores how anthropologists have worked with the concept of relatedness. Examines contemporary issues and discusses current kinship studies of relatedness and how those apply to new reproductive technologies such as surrogate mothers, in vitro fertilization, the buying and selling of eggs and sperm, and the legal implications of these new ways of having children.
Prerequisite: Sociology 101 or Anthropology 101.
[254b - ESD, IP. Gender and Sexuality in Latin America. (Same as Gender and Women's Studies 254, Latin American Studies 257, and Sociology 254.)]
[272b - ESD, IP. The Right to Be Cold: Contemporary Arctic Environmental and
Cultural Issues. (Same as Environmental Studies 272.)]
280b - ESD. Race, Biology, and Anthropology. Spring 2012. Scott MacEachern.
Critically examines the biological justifications used to partition humanity into racial groups. Investigates the nature of biological and genetic variability within and between human populations, as well as the characteristics of human biological races as they have traditionally been defined. Considers whether race models do a good job of describing how human populations vary across the earth. Critically appraises works by a variety of authors, including Phillippe Rushton, Charles Murray, and Michael Levin, who claim that racial identity and evolution work together to structure the history and the potentials of human groups in different parts of the world. (Same as Africana Studies 280.)

Prerequisite: Anthropology 101 or 102, or Sociology 101, or permission of the instructor.

291b-294b. Intermediate Independent Study in Anthropology. The Department. 310b. Contemporary Issues in Anthropology. Spring 2012. Krista Van Vleet.

Close readings of recent ethnographies and other materials are used to examine current theoretical and methodological developments and concerns in anthropology.

Prerequisite: Anthropology 101, 102, 201, and 203; or permission of the instructor.
401b-404b. Advanced Independent Study and Honors in Anthropology. The Department.

## Theater and Dance

Roger Bechtel, Department Cbair<br>Noma Petroff, Department Coordinator

Professor: Davis R. Robinson**<br>Associate Professor: Roger Bechtel<br>Assistant Professors: Charlotte M. Griffin, Abigail Killeen<br>Senior Lecturers: Gwyneth Jones*, Paul Sarvis**<br>Lecturers: Judy Gailen, Daphne McCoy, Michael Schiff-Verre<br>Fellow: Nyama McCarthy-Brown<br>Laboratory Instructor: Deb Puhl

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 pages 198-99.

## Dance

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, a the latter term designating a wide spectrum of styles that focus on an inventive, unrestricted approach to movement. Modern and ballet technique and repertory courses (111, 211, 221, 311; and 112, 212, 222,312 ) earn one-half credit each semester. Each course may be repeated a maximum of four times for credit. Students may enroll in a technique course ( $111,211,221,311$ ) and a repertory course $(112,212,222,312)$ in the same semester for one full academic course credit. Dance 121, Ballet $I$ is a one-credit technique course with a repertory component. Attendance at all classes is required. Grading is Credit/D/Fail.

## Requirements for the Minor in Dance

The minor consists of five course credits: Dance 101; Dance 111/112, 121, 211/212, 221/222, or 311/312; Dance 102, 130 (same as Theater 130), 140, 145 (same as Theater 145), or 160; and two additional courses at the 200 level or higher.

Students must earn a grade of CR (Credit) or C- or better in order to have a course count toward the minor in dance.

## Introductory, Intermediate, and Advanced Courses

101c - ESD, VPA. Cultural Choreographies: An Introduction to Dance. Spring 2013. Paul Sarvis.

Dancing is a fundamental human activity, a mode of communication, and a basic force in social life. Investigates dance and movement in the studio and classroom as aesthetic and cultural phenomena. Explores how dance and movement activities reveal information about cultural norms and values and affect perspectives in our own and other societies. Using ethnographic methods, focuses on how dancing maintains and creates conceptions of one's own body, gender relationships, and personal and community identities. Experiments with dance and movement forms from different cultures and epochs-for example, the hula, New England contradance, classical Indian dance, Balkan kolos, ballet, contact improvisation, and African American dance forms from swing to hip-hop-through readings, performances, workshops in the studio, and field work. (Same as Gender and Women's Studies 102.)

102c - VPA. Making Dances. Every year. Fall 2011. Charlotte Griffin and Paul Sarvis.
Explores ways of choreographing dances and multimedia performance works, primarily solos, duets, trios. A strong video component introduces students-regardless of previous experience in dance-to a wide range of compositional methods that correspond to creative process in other arts: writing, drawing, composing. Includes some reading, writing, and discussion, as well as work with visiting professional dance companies and attendance at live performances.
104c. Stagecraft. Every year. Fall 2011. Michael Schiff-Verre.
Introduction to the language, theory, and practice of technical theater. Hands-on experience in lighting, scenic and property construction, costuming, and stage management. Considers the possibilities, demands, and limits inherent in different forms of performance and performance spaces, and explores the job roles integral to theater and dance production. Includes forty hours of laboratory work. Grading is Credit/D/Fail. (Same as Theater 104.)
111c - VPA. Modern I: Technique. Every semester. The Department.
Classes in modern dance technique include basic exercises to develop dance skills such as balance and musicality. More challenging movement combinations and longer dance sequences build on these exercises. While focusing on the craft of dancing, students develop an appreciation of their own styles and an understanding of the role of craft in the creative process. During the semester, a historical overview of twentieth-century American dance on video is presented. Attendance at all classes is required. May be repeated for credit. Grading is Credit/D/Fail. One-half credit.

112c - VPA. Modern I: Repertory and Performance. Every semester. The Department. Repertory students are required to take Dance 111 concurrently. Repertory classes provide the chance to learn faculty-choreographed works or reconstructions of historical dances. Class meetings are conducted as rehearsals for performances at the end of the semester: the December Studio Show, the annual Spring Performance in Pickard Theater, or Museum Pieces

## Courses of Instruction

at the Bowdoin College Museum of Art in May. Additional rehearsals are scheduled before performances. Attendance at all classes and rehearsals is required. May be repeated for credit. Grading is Credit/D/Fail. One-half credit.

121c - VPA. Ballet I: Technique. Fall 2012. Every other year. Charlotte Griffin.
Introduces the fundamental principles of classical ballet technique as a studio practice and performing art. Includes barre, center, and across-the-floor exercises with an emphasis on anatomical alignment, complex coordination, movement quality, and musicality. Combines dance training with assigned reading and writing, video viewing, performance attendance, and in-class discussion to increase appreciation for and participation in the art form. Grading is Credit/D/Fail. Ballet I is a one-credit course with a repertory component.

130c - VPA. Principles of Design. Every year. Fall 2011. Judy Gailen.
An introduction to theatrical design that stimulates students to consider the world of a play, dance, or performance piece from a designer's perspective. Through projects, readings, discussion, and critiques, students explore the fundamental principles of visual design, as they apply to set, lighting, and costume design, as well as text analysis for the designer, and the process of collaboration. Strong emphasis on perceptual, analytical, and communication skills. (Same as Theater 130.)

140c - VPA. History of Twentieth-Century Dance. Spring 2013. Paul Sarvis.
Excavates histories of twentieth-century modern dance and ballet by asking aesthetic, philosophical, and social questions. Focuses on dance vocabularies and notions of representation-illusion and authenticity, intention and authorship, changing ideas of the performance space, the countercultural attitude of modernism, and the sociopolitical dimensions of dance performance. These inquiries are introduced by movement exercises in the studio, and elucidated by video viewing, reading, discussion, and writing.

145c - VPA. Performance and Narrative. Spring 2013. Roger Bechtel.
For millennia, we have organized our fictions, our religions, our histories, and our own lives as narratives. However much the narrative form has been called into question in recent years, it seems we just cannot stop telling each other stories. Examines the particular nexus between narrative and performance: What is narrative? How does it work? What are its limits and its limitations? How do we communicate narrative in performance? Involves both critical inquiry and the creation of performance pieces based in text, dance, movement, and the visual image. (Same as Theater 145.)

## 211c - VPA. Modern II: Technique. Every semester. The Department.

A continuation of the processes introduced in Dance 111. May be repeated for credit. Grading is Credit/D/Fail. One-half credit.

212c - VPA. Modern II: Repertory and Performance. Every semester. The Department.
Intermediate repertory students are required to take Dance 211 concurrently. A continuation of the principles and practices introduced in Dance 112. May be repeated for credit. Grading is Credit/D/Fail. One-half credit.

221c - VPA. Ballet II: Technique. Fall 2011. Charlotte Griffin.
A continuation of the processes introduced in Dance 121. Grading is Credit/D/Fail. One-half credit.

Prerequisite: Dance 121 or permission of the instructor.

222c - VPA. Ballet II: Repertory and Performance. Fall 2011. Charlotte Griffin.
Repertory students are required to take Dance 221 concurrently. Repertory classes are an opportunity to learn and perform new choreography or historical reconstructions created by faculty or guests. Class meetings conducted as rehearsals. Additional rehearsals may be required. Attendance at all classes, studio and stage rehearsals, and performances required. Grading is Credit/D/Fail. One-half credit.

240c - VPA. Performance in the Twenty-first Century. Spring 2014. Roger Bechtel.
Hybrid by nature, rebellious in spirit, performance rejects the boundaries and conventions of traditional theater and dance, combining and recombining these live forms with every other artistic mode and medium imaginable. Yet as the first decade of the new century draws to an end, so does the fifth decade of this "new" form. Is it still breaking boundaries, or has boundary-breaking itself become a convention? What, these days, is new about performance? Examines the genealogical roots of performance and studies the ways twenty-first-century performance is exploring the body, the mind, technology, intercultural aesthetics, and globalism. Students will enact critical inquiries in the creation of their own performance works. (Same as Theater 240.)

Prerequisite: One 100 -level course in theater or dance.
250c - VPA. Theater, Dance, and the Common Good. Spring 2013. Roger Bechtel.
Theater and dance have a long history of political engagement, social intervention, and community building. Examines the historical precedents for today's "applied" theater and dance practice, including Piscator, Brecht, Boal, Cornerstone Theatre, Judson Dance Theatre, and Yvonne Rainer. Significant time also spent working with local agencies and institutions to create community-based performances addressing social issues such as homelessness, poverty, prejudice, and the environment, among others. (Same as Theater 250.)
270c - VPA. Choreography for Dancers: Invention, Method, and Purpose. Fall 2012. Charlotte Griffin.

Through a vigorous sequence of creative projects, fluent dancers excavate sources and explore methods for making dance. Detailed work on personal movement vocabulary, musicality, and the use of multidimensional space leads to a strong sense of choreographic architecture. Students explore the play between design and accident-communication and open-ended meaning-and irony and gravity. Studio work is supported by video viewing, and readings on dance, philosophy, and other arts.

Prerequisite: Dance 101 or 102 and two of: Dance 112, 212, or 312.
291c-294c. Intermediate Independent Study in Dance. The Department.
311c - VPA. Modern III: Technique. Every semester. The Department.
A continuation of the processes introduced in Dance 211. May be repeated for credit. Grading is Credit/D/Fail. One-half credit.

312c - VPA. Modern III: Repertory and Performance. Every semester. The Department. Intermediate/advanced repertory students are required to take Dance 311 concurrently. A continuation of the principles and practices introduced in Dance 212. May be repeated for credit. Grading is Credit/D/Fail. One-half credit.

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340c. Live Performance and Digital Media. Fall 2012. Roger Bechtel.
Over the past two decades, digital media has infiltrated live performance to such an extent that it has become almost as indispensible as sets, lights, and costumes. Theater and dance artists have embraced these media as a way to enhance the expressivity and scale of their work, as well as a cultural phenomenon to be critically investigated. Introduces students to sound and video applications such as Garage Band, Final Cut Pro, Motion, and Isadora, and requires them to create performances incorporating these tools. Also contextualizes student projects with theoretical readings and examinations of contemporary performance practitioners. (Same as Theater 340.)

Prerequisite: One 100 -level course in theater or dance.
401c-404c. Advanced Independent Study in Dance. The Department.

## 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: two courses from Theater 101, 104 (same as Dance 104), 120, 130 (same as Dance 130), 145 (same as Dance 145), 150 (same as Dance 150); two courses from Theater 201, 220, 225, 240 (same as Dance 240), 250 (same as Dance 250), 260 (same as English 214), 270, 305, 320, 321, 322, 323, 340 (same as Dance 340, 370; and one additional course in theater or dance.

Students must earn a grade of CR (Credit) or C- or better in order to have a course count toward the minor in theater.

## Introductory, Intermediate, and Advanced Courses

101c - VPA. Making Theater. Every year. Spring 2012. Abigail Killeen.
An active introductory exploration of the nature of theater: how to think about it, how to look at it, how to make it. Students examine a range of theatrical ideas and conventions, see and reflect on live performance, and experience different approaches to making work. Designers, directors, performers, and scholars visit the class to broaden perspective and instigate experiments. Students work collaboratively throughout the semester to develop and perform original work.

104c. Stagecraft. Every year. Fall 2011. Michael Schiff-Verre.
Introduction to the language, theory, and practice of technical theater. Hands-on experience in lighting, scenic and property construction, costuming, and stage management. Considers the possibilities, demands, and limits inherent in different forms of performance and performance spaces, and explores the job roles integral to theater and dance production. Includes forty hours of laboratory work. Grading is Credit/D/Fail. (Same as Dance 104.)

106c. Introduction to Drama. Spring 2012. Aaron Kitch.
Explores representative works from a wide range of gentes and styles of theater, from the festival of Dionysus in ancient Greece through the Renaissance and into the global theater of the twenty-first century. Traces the evolution of plot design, with special attention to the politics of playing, the shifting strategies of representing human agency, and contemporary relationships between the theater and other visual media. Authors include Sophocles, Aristophanes, Marlowe, Shakespeare, Behn, Wilde, Beckett, Mamet, Wilson, and Churchill, with secondary texts by Aristotle, Brecht, Artaud, and Grotowski, among others. Students are asked to participate in staged readings during class and participate in group projects that imagine new ways to stage the plays we study. (Same as English 106.)

120c - VPA. Acting I. Every semester. Fall 2011. Roger Bechtel and Abigail Killeen. Spring 2012. Abigail Killeen.

Introduces students to the intellectual, vocal, physical, and emotional challenge of the acting process. Students examine theatrical texts and practice the art of translating intellectual analysis into embodied performance. Fundamentals of text analysis are learned and practiced, preparing students for the more complex performance work required in all sections of Acting II.
130c - VPA. Principles of Design. Every year. Fall 2011. Judy Gailen.
An introduction to theatrical design that stimulates students to consider the world of a play, dance, or performance piece from a designer's perspective. Through projects, readings, discussion, and critiques, students explore the fundamental principles of visual design, as they apply to set, lighting, and costume design, as well as text analysis for the designer, and the process of collaboration. Strong emphasis on perceptual, analytical, and communication skills. (Same as Dance 130.)

## 145c - VPA. Performance and Narrative. Spring 2013. Roger Bechtel.

For millennia, we have organized our fictions, our religions, our histories, and our own lives as narratives. However much the narrative form has been called into question in recent years, it seems we just cannot stop telling each other stories. Examines the particular nexus between narrative and performance: What is narrative? How does it work? What are its limits and its limitations? How do we communicate narrative in performance? Involves both critical inquiry and the creation of performance pieces based in text, dance, movement, and the visual image. (Same as Dance 145.)

150c - VPA. Improvisation. Every other year. Fall 2011. Davis Robinson.
Improrisation is a fundamental tool used by dancers, musicians, actors, writers, and other artists to explore the language of a medium and to develop new work. An interdisciplinary introduction to some of the primary forms of improvisation used in dance and theater. Content includes theater games, narrative exercises, contact improvisation, and choreographic structures.

195c - VPA. Production and Performance. Every semester. The Department.
Engagement in the presentation of a full-length work for public performance with a faculty director or choreographer. Areas of concentration within the production may include design, including set, light, sound, or costume; rehearsal and performance of roles; service as assistant director or stage manager. In addition to fulfilling specific production responsibilities, students meet weekly to synthesize work. Students gain admission to Theater 195 either through audition (performers) or through advance consultation (designers, stage managers,

## Courses of Instruction

and assistant directors). Students register for Theater 195 during the add/drop period at the beginning of each semester. Students are required to commit a minimum of six hours a week to rehearsal and production responsibilities over a period of seven to twelve weeks; specific time commitments depend upon the role the student is assuming in the production and the production schedule. Grading is Credit/D/Fail. One-half credit. May be repeated a maximum of four times for credit, earning a maximum of two credits.

Prerequisite: Permission of the instructor.
201c - VPA. Theater History and Theory. Every other year. Spring 2012. Roger Bechtel.
Examines seminal historical moments in theater through a focus on such conceptual categories as representation and the real, politics and aesthetics, the body, visuality, spectatorship, and so on. Historical eras covered include ancient Greece, medieval Japan, Renaissance Europe, and romantic, modernist, and postmodernist Europe and America. Focus placed not on these individual moments per se, but on the effect of social and cultural pressures on the aesthetics of live performance across different times, cultures, and disciplines. Some time spent in the studio experimenting with historical forms.

210c. Shakespeare's Comedies and Romances. Every other year. Spring 2012. William Watterson.

Examines A Midsummer Night's Dream, The Merchant of Venice, Twelfth Night, As You Like It, The Winter's Tale, and The Tempest in light of Renaissance genre theory. (Same as English 210.)

Prerequisite: One first-year seminar or 100-level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
[211c. Shakespeare's Tragedies and Roman Plays. (Same as English 211.)]
212c. Shakespeare's History Plays. Fall 2011. William Watterson.
Explores the relationship of Richard III, 2 Henry VI, and the second tetralogy (Ricbard II, the two parts of Henry IV and Henry V) to the genre of English chronicle play that flourished in the 1580s and 1590s. Readings in primary sources (More, Hall, and Holinshed) are supplemented by readings of critics (Tillyard, Kelly, Siegel, Greenblatt, Goldberg, etc.) concerned with locating Shakespeare's own orientation toward questions of history and historical meaning. Regular screenings of BBC productions. (Same as English 212.)

Prerequisite: One first-year seminar or 100 -level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
220c - VPA. Acting II: Voice and Text. Every yeat. Fall 2011. Abigail Killeen.
An intermediate acting course focused on the physical discipline and intellectual challenge of pursuing theatrical objectives through language. Traditional and experimental vocal training techniques and are introduced and practiced. Students are also challenged to investigate character development through vocal choices, to learn how to communicate heightened emotion safely and effectively, and how to develop a rehearsal methodology for stage dialects. This course, along with Theater 225, Acting II: Physical Theater, is part of a two-semester course series. Theater 220 and 225 may be taken individually or in any order.

Prerequisite: One 100 -level course in theater.

## 225c - VPA. Acting II: Physical Theater. Every year. Spring 2013. Davis Robinson.

Extends the principles of Acting I through a full semester of rigorous physical acting work focused on presence, energy, relaxation, alignment, and emotional freedom. Develops and brings the entire body to the act of being on stage through highly structured individual exercises and ensemble-oriented improvisational work. Scene work is explored through the movement-based acting disciplines of Lecoq, Grotowski, Meyerhold, or Viewpoints. Contemporary physical theater makers Théâtre de Complicité, Mabou Mines, SITI company, and Frantic Assembly are discussed. This course, along with Theater 220, Acting II: Voice and Text, is part of a two-semester course series. Theater 220 and 225 may be taken individually or in any order.

Prerequisite: One 100 -level course in theater.
230c. Theater and Theatricality in the Restoration and the Eighteenth Century. Every other year. Fall 2012. Ann Kibbie.
An overview of the development of the theater from the reopening of the playhouses in 1660 to the end of the eighteenth century, with special emphasis on the emergence of new dramatic modes such as Restoration comedy, heroic tragedy, "she-tragedy," sentimental comedy, and opera. Other topics include the legacy of Puritan anxieties about theatricality; the introduction of actresses on the professional stage; adaptations of Shakespeare on the Restoration and eighteenthcentury stage; other sites of public performance, such as the masquerade and the scaffold; and the representation of theatricality in the eighteenth-century novel. (Same as English 230.)

Prerequisite: One first-year seminar or 100-level course in English.
Note: This course fulfills the pre-1800 literature requirement for English majors.
240c - VPA. Performance in the Twenty-first Century. Spring 2014. Roger Bechtel.
Hybrid by nature, rebellious in spirit, performance rejects the boundaries and conventions of traditional theater and dance, combining and recombining these live forms with every other artistic mode and medium imaginable. Yet as the first decade of the new century draws to an end, so does the fifth decade of this "new" form. Is it still breaking boundaries, or has boundarybreaking itself become a convention? What, these days, is new about performance? Examines the genealogical roots of performance and studies the ways twenty-first-century performance is exploring the body, the mind, technology, intercultural aesthetics, and globalism. Students will enact critical inquiries in the creation of their own performance works. (Same as Dance 240.)

Prerequisite: One 100 -level course in theater or dance.
250c - VPA. Theater, Dance, and the Common Good. Spring 2013. Roger Bechtel.
Theater and dance have a long history of political engagement, social intervention, and community building. Examines the historical precedents for today's "applied" theater and dance practice, including Piscator, Brecht, Boal, Cornerstone Theatre, Judson Dance Theatre, and Yvonne Rainer. Significant time also spent working with local agencies and institutions to create community-based performances addressing social issues such as homelessness, poverty, prejudice, and the environment, among others. (Same as Dance 250.)
260c - VPA. Playwriting. Every other year. Fall 2012. Roger Bechtel.
A writing workshop for contemporary performance that includes introductory exercises in writing dialogue, scenes, and solo performance texts, then moves to the writing (and rewriting) of a short play. Students read plays and performance scripts, considering how writers use

## Courses of Instruction

image, action, speech, and silence; how they structure plays and performance pieces; and how they approach character and plot. (Same as English 214.)

Prerequisite: One 100 -level course in theater or dance or permission of the instructor.
270 c - VPA. Directing. Every year. Fall 2011. Davis Robinson.
Introduces students to the major principles of play direction, including conceiving a production, script analysis, staging, casting, and rehearsing with actors. Students actively engage directing theories and techniques through collaborative class projects, and complete the course by conceiving, casting, rehearsing, and presenting short plays of their choosing. A final research and rehearsal portfolio is required.

Prerequisite: One 100-level course in theater or dance.
291c-294c. Intermediate Independent Study in Theater. The Department.
305c. Studio 305. Every third year. Roger Bechtel.
A senior theater seminar focusing on independent work. Advanced students creating capstone projects in playwriting, directing, acting, and design meet weekly as a group to critique, discuss, and present their work. Final performances given at the end of the semester.

Prerequisite: One 100-level course in theater and one additional course in theater or dance, preferably at the 200 level.

320c. Theater Styles. Every third year. Fall 2012. Davis Robinson.
An advanced acting class that explores issues of style. What is Tragedy? Farce? Melodrama? Commedia? Realism? The Absurd? Through research, analysis, and scene work in class, students become familiar with a range of theatrical idioms. Emphasis is placed on understanding the social/cultural needs that give rise to a particular style, and the way in which style is used in contemporary theater to support or subvert a text.

Prerequisite: One 100 -level course in theater and one additional course in theater or dance, preferably at the 200 level.

321c. Comedy in Performance. Every third year. Spring 2013. Davis Robinson.
Looks at several facets of comedy on stage, from its origins in Greek and Roman theater to contemporary comic forms. Theory is combined with practical exercises in clowning, satire, physical comedy, wit, timing, phrasing, and partner work to develop a comic vocabulary for interpreting both scripted and original work. Students work in solos, duets, and groups to create final performance projects that are presented to the public at the end of the semester.

Prerequisite: One 100 -level course in theater and one additional course in theater or dance, preferably at the 200 level.

322c. Ensemble: The Art of Collective Creation. Spring 2014. Roger Bechtel.
Experienced theater students collaborate to devise an original performance event. Examines the history of collective creation and the various emphases different artists have brought to that process. Immerses students in the practice of devising, stretching from conception and research to writing, staging, and ultimately performing a finished piece.

Prerequisite: Theater 120 or permission of the instructor.

323c. Acting Shakespeare. Spring 2012. Roger Bechtel.
An advanced-level acting course dedicated to the study of Shakespeare toward its original purpose: performance. Building on the skill sets learned in Acting I and both sections of Acting II, students combine advanced text and rhetorical analysis with rigorous physical and vocal work designed to bring the text off the page and into performance. May be repeated for credit.

Prerequisite: Theater 120 and Theater 220 or 225, or permission of the instructor.
340c. Live Performance and Digital Media. Fall 2012. Roger Bechtel.
Over the past two decades, digital media has infiltrated live performance to such an extent that it has become almost as indispensible as sets, lights, and costumes. Theater and dance artists have embraced these media as a way to enhance the expressivity and scale of their work, as well as a cultural phenomenon to be critically investigated. Introduces students to sound and video applications such as Garage Band, Final Cut Pro, Motion, and Isadora, and requires them to create performances incorporating these tools. Also contextualizes student projects with theoretical readings and examinations of contemporary performance practitioners. (Same as Dance 340.)

Prerequisite: One 100 -level course in theater or dance.
370c. Advanced Directing. Spring 2013. The Department.
A continuation of Theater 270. Students build upon their knowledge of play analysis and staging to examine composition, design, and actor collaboration in greater depth. Advanced directing skills, theories, and techniques will be exercised through work on non-realistic material. Culminates with each student directing a 30 -minute-long theatrical work.
Prerequisite: Theater 270.
401c-404c. Advanced Independent Study in Theater. The Department.

## Edugational Resources and Facilities

## Arts Facilities

The arts at Bowdoin are characterized by stunning facilities and an absolute commitment to their role in a liberal education.

Not having painted, danced, or played an instrument before coming to Bowdoin is not a barrier to participate, evidenced by 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 scholarship with recognized faculty.

## Visual Arts Facilities

Students have the opportunity to take classes and do independent work in a variety of studio facilities. Three main studios, along with prime exhibition space, are located in the Visual Arts Center. Its prominent place on the Bowdoin Quad, the spectacular light from the large windows above, and the expansive views of the campus have nurtured creativity and learning for decades. Painting studios, computer studios, an architecture studio, faculty studios, and the photography facilities are located a short distance away in the McLellan Building. The printmaking studio is located in a renovated carriage house across the street from the Visual Arts Center, and two sculpture studios are located in a renovated textile mill a short distance from campus. The Visual Arts Center also houses the Pierce Art Library (see page 281) and Kresge Auditorium.

## Pickard and Wish Theaters

Memorial Hall includes state-of-the-art 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. A new dance studio is located a short distance away in the Brunswick Station complex at 16 Station Avenue.

## Studzinski Recital Hall

The world-class Studzinski Recital Hall is a transformation of the Curtis Pool building (also designed by McKim, Mead, and White) 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.

See also: Museums, page 282.

## Genter for Learning and Teaghing

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 help
with writing, 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 distribution requirement, including placement in the Mathematics 50: 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 peet tutors. 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 a peer tutoring program 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 tutors 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. 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

## Educational Resources and Facilities

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 a scientific field station on Kent Island, off Grand Manan Island, 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 200-acre island was presented to the College in 1935 by John Sterling Rockefeller. Since then, the field station has built an international reputation, with more than 160 publications based on research at Kent Island, many of them co-authored by Bowdoin students.
Kent Island 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. The island also features a variety of terrestrial habitats. In 2005, the College acquired neighboring Hay and Sheep Islands to help preserve the unique environment offered by the Scientific Station.

Although formal courses are not offered at the station, students from Bowdoin and other institutions select problems for investigation on Kent Island 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 Kent Island 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 is devoted to interdisciplinary teaching and research in archaeology, marine biology, terrestrial ecology, ornithology, and geology.

The Center's facilities include a marine biological laboratory with flowing seawater for laboratory observation of live marine organisms, a pier facility located on Harpswell Sound, and a terrestrial ecology laboratory, which serves as a field station for research and study of coastal ecology. These facilities play an active role in Bowdoin's programs in biology, earth and oceanographic science, and environmental studies, and the site has been widely used for studio art courses. In addition, the centrally located farmhouse provides seminar and kitchen facilities where classes from all disciplines can gather in a retreat-like atmosphere that encourages sustained, informal interaction among students and faculty members.

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.

## Coleman Farm

During the course of the academic year, students study ecology at a site three miles south of the campus, using an 83 -acre tract of College-owned land that extends to a salt marsh and the sea. Numerous habitats of resident birds are found on the property, which is also a stopover point for many migratory species. Because of its proximity to campus, many students visit Coleman Farm for natural history walks, cross-country skiing, and other forms of recreation.

## Information Technology

Bowdoin places a strong emphasis on integrating technology into the academic and social experience. Upon arrival, students have access to the latest tools, informed consultants, and focused training to take full advantage of Bowdoin's technical resources. Remember that many of your classmates may already know the answer to your questions. Ask them first-it is a great way to get to know someone. If you still have questions, Bowdoin's Help Desk is available with extended hours throughout the week.

The Chief Information Officer leads an Information Technology (IT) Division that engages faculty and students to deliver solutions that make a difference in their teaching, learning, research, and community. From classrooms to residence rooms, access to technology is everywhere. Resources available to students include personal e-mail accounts, wireless Internet access throughout campus; network storage, video conferencing capability, cable television, VoIP telephone systems, and voice mail. IT also provides a full-time Help Desk that supports Macintosh, Windows, and Linux computers and includes a student-run Help Desk. Bowdoin offers a number of site-licensed system and application software such as Windows, MacOS, UNIX, Microsoft Office Professional, Mathematica, and other specialized academic and administrative applications. There is $24 / 7$ software support for major applications. The College provides a free student equipment loaner pool that provides video, sound, projection, laptops, recording devices, digital cameras, along with newer technology for testing and evaluation.

Other services that IT provides include technical, design, editorial, and project development consulting. IT is constantly exploring technology trends while also adopting the best solutions in business and higher education to deliver easily accessible, secure, stable technology services over one of the fastest campus-wide gigabit networks in the nation.

## Educational Resources and Facilities

In addition to sixteen academic department computer labs, there are nine public labs and more than two hundred publicly available computers and nineteen public print stations located around the campus.

If you have an idea or solution that uses technology to improve the lives of students at Bowdoin, share it with the CIO-it just might get funded.

## 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 book, journal, and manuscript collections, historically recognized as among Bowdoin's hallmarks of excellence, the Library offers a wealth of electronic resources and 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), to other library catalogs in the region and worldwide, and to a dazzling array of electronic and print resources. The Library's collections, developed over a period of 200 years, exceed one million volumes. Library offerings include nearly 30,000 print and electronic periodical and newspaper subscriptions, 300 online indexes and databases, e-books, audiovisual items, maps, photographs, and over 5,000 linear feet of manuscripts and archival records.

Librarians and faculty members 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 first-year 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. There are wireless connections throughout the building, technologically equipped group learning spaces, an electronic classroom for instruction in online resources, a computer laboratory, and meeting rooms for public events and student presentations.

The Government Documents Collection offers the Bowdoin community and midcoast Maine citizens access to a wealth of print and digital government information reflecting over two centuries of federal and state history.

The George J. Mitchell Department of Special Collections \& Archives includes rare books and manuscripts of unusual depth for a college library, plus images, recordings, 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 Hatch Science Library offers reference 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 computer and listening stations, scores, sound recordings, videos, and books about music.

The Language Media Center in Sills Hall provides multimedia facilities to support learning foreign languages and houses most Library audiovisual materials. The Center offers streamed digital radio, live international television, foreign language newspapers and magazines from around the world, plus classroom and playback facilities for all international film standards.

## Joseph McKeen 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 spring break trips that connect their peers with community organizations to address public issues in places ranging from Mississippi and Washington, D.C., to Guatemala and Peru. 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.

## Museums

## 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 70 European paintings and a portfolio of 140 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 17,000 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 small 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 of McKim, Mead, and White, 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 dramatically shadowed 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 small 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 works on paper collections 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 twentieth-century 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 and 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 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 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 art lovers. 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-MacMillan Arctic Museum and Arctic Studies Center

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

The museum's collections include equipment, paintings, and photographs relating to the history of Arctic exploration, natural history specimens, artifacts and drawings made by indigenous people of Arctic North America, and contemporary Canadian Inuit sculptures and prints. 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 and the Kane Lodge Foundation, 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.

## Student Fellowships and Researah

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 than one hundred 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 entich students' undergraduate experience, make students more competitive for entrance to graduate school, and prepare students to successfully undertake graduate study.

## 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 directlv 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 Sogial 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 Instruation

Barry Mills, A.B. (Bowdoin), Ph.D. (Syracuse), J.D. (Columbia), President of the College. (2001) $\dagger$

Samaa Abdurraqib, B.A. (Ohio State), M.A., Ph.D. (Wisconsin-Madison), Visiting Assistant Professor of Gender and Women's Studies. (2010)

Ericka A. Albaugh, B.A. (Pepperdine), M.A. (Tufts-Fletcher School), Ph.D. (Duke), Assistant Professor of Government. (On leave of absence for the academic year.) (2008)

Anthony F. Antolini, A.B. (Bowdoin), M.A., M.A., Ph.D. (Stanford), Senior Lecturer in Music. (1992)

María Báez Marco, B.A. equiv., M.A. equiv. (Universidad Complutense de Madrid), Visiting Lecturer in Spanish. (Fall semester.) (2009)
William Barker, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Isaac Henry Wing Professor of Mathematics. (1975)

Jack R. Bateman, B.Sc. (Dalhousie), Ph.D. (Harvard), Assistant Professor of Biology. (On leave of absence 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)

Rachel J. Beane, B.A. (Williams), Ph.D. (Stanford), Professor of Earth and Oceanographic Science. (1998)
Roger Bechtel, B.A. (DePauw), J.D. (New York University), M.F.A. (Yale), M.A., Ph.D. (Cornell), Associate Professor of Theater and Dance. (2008)

Susan E. Bell, A.B. (Haverford), A.M., Ph.D. (Brandeis), A. Myrick Freeman Professor of Social Sciences. (On leave of absence for the academic year.) (1983)
Michael Birenbaum Quintero, A.A. (Simon's Rock College of Bard), B.A. (Eugene Lang), M.A., Ph.D. (New York University), Assistant Professor of Music. (2010)

Gil Birney, B.A. (Williams), M.Div. (Virginia), Coach in the Department of Athletics. (2000)
John B. Bisbee, B.F.A. (Alfred), Lecturet in Art. (1996)
Paola Boel, B.S. (Università L. Bocconi, Italy), M.S., Ph.D. (Purdue), Assistant Professor of Economics. (2005)
Cassandra Borges, B.A. (Indiana), Ph.D. (Michigan), CFD Postdoctoral Fellow and Lecturer in Classics. (2011)
Barbara Weiden Boyd, A.B. (Manhattanville), A.M., Ph.D. (Michigan), Winkley Professor of Latin and Greek. (1980)

[^2]Jorge J. Bravo, A.B. (Princeton), M.A., Ph.D. (California-Berkeley), Visiting Assistant Professor of Classics. (2011)
Aviva Briefel, B.A. (Brown), M.A., Ph.D. (Harvard), Associate Professor of English. (On leave of absence for the fall semester.) (2000)

Richard D. Broene, B.S. (Hope), Ph.D. (California-Los Angeles), Professor of Chemistry. (On leave of absence for the academic year.) (1993)
Jorunn J. Buckley, Cand. mag. (Oslo), Cand. philol. (Bergen), Ph.D. (Chicago), Associate Professor of Religion. (1999)
Bradford Burnham, B.S. (Maine), M.S. (Colorado State), Coach in the Department of Athletics. (2000)
Kathryn Byrnes, B.A. (Davidson), M.E. (Wake Forest), Ph.D. (Colorado-Boulder), Visiting Assistant Professor of Education. (2009)

Tristan Cabello, B.A., M.A. (Université Marc Bloch-France), M.A., Ph.D. (Northwestern), Andrew W. Mellon Postdoctoral Fellow in Africana Studies. (2011)

Philip Camill III, B.A. (Tennessee), Ph.D. (Duke), Rusack Associate Professor of Environmental Studies and Earth and Oceanographic Science. (2008)
David C. Caputi, B.A. (Middlebury), M.Ed. (North Adams State), Coach in the Department of Athletics. (2000)

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

Nadia V. Celis, B.A. (Universidad de Cartagena), M.A., Ph.D. (Rutgers), Assistant Professor of Romance Languages. (2007)
Steven R. Cerf, A.B. (Queens College), M.Ph., Ph.D. (Yale), George Lincoln Skolfield Jr. Professor of German. (1971)
Tess Chakkalakal, B.A. (Toronto), M.A., Ph.D. (York), Assistant Professor of Africana Studies and English. (On leave of absence for the academic year.) (2008)
Connie Y. Chiang, B.A. (California-Santa Barbara), M.A., Ph.D. (Washington), Associate Professor of History and Environmental Studies. (2002)

Isabelle Choquet, B.A.-equiv. (Poitiers-France), M.A. (Michigan State), Ph.D. (Virginia), Visiting Assistant Professor of Romance Languages. (2011)
Eric L. Chown, B.A., M.S. (Northwestern), Ph.D. (Michigan), Professor of Computer Science. (1998)

Ronald L. Christensen, A.B. (Oberlin), A.M., Ph.D. (Harvard), James Stacy Coles Professor of Natural Sciences. (On leave of absence for the fall semester.) (1976)
Wendy Christensen, B.A. (SUNY-Stony Brook), M.S., Ph.D. (Wisconsin-Madison), Visiting Assistant Professor of Sociology. (2010)

Brock Clarke, B.A. (Dickinson), M.A., Ph.D. (Rochester), Associate Professor of English. (2010)
David Collings, A.B. (Pacific Union), A.M., Ph.D. (California-Riverside), Professor of
English. (1987)
Thomas Conlan, B.A. (Michigan), M.A., Ph.D. (Stanford), Professor of History and Asian Studies. (On leave of absence for the academic year.) (1998)

## Officers of Instruction

Sarah O'Brien Conly, A.B. (Princeton), M.A., Ph.D. (Cornell), Assistant 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)
Megan L. Cook, B.A. (Michigan), M.S. (New York), Ph.D. (Pennsylvania), Andrew W. Mellon Postdoctoral Fellow in English. (2011)

Thomas B. Cornell, A.B. (Amherst), Richard E. Steele Artist in Residence. (1962)
Peter Coviello, B.A. (Northwestern), M.A., Ph.D. (Cornell), Professor of English. (1998)
Mariana M. Cruz, B.A. (Puerto Rico), M.A. (Texas Woman's), M.S., Ph.D. (Cornell), Postdoctoral Fellow and Lecturer in Education. (2009)

Elena Cueto-Asín, B.A. (Universidad Complutense de Madrid), M.A., Ph.D. (Purdue), Associate Professor of Romance Languages. (2000)

Songren Cui, B.A. (Zhongshan), M.A., Ph.D. (California-Los Angeles), Associate Professor of Asian Studies. (1999)

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. (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. (1999)

Gabrielle C. L. David, B.S. (William and Mary), M.S., Ph.D. (Colorado State), Visiting Assistant Professor of Earth and Oceanographic Science. (2011)

Dan Davies, B.S. (Keene State), M.Ed., M.S.P.T. (Hartford), Head Athletic Trainer. (2003)
Shelley M. Deane, B.S. (Manchester), M.A. (Warwick), Ph.D. (London School of Economics), Assistant Professor of Government. (2004)

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. (1991)

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

Julián P. Díaz, B.S. (EscSuela Superior Politécnia del Litoral-Ecuador), M.S. (Universitat Pompeu Fabra-Spain), M.A., Ph.D. (Minnesota), Assistant Professor of Economics. (2006)

Sara A. Dickey, B.A. (Washington), M.A., Ph.D. (California-San Diego), Professor of Anthropology. (1988)

Patsy S. Dickinson, A.B. (Pomona), M.S., Ph.D. (Washington), Josiah Little Professor of Natural Sciences. (1983)

Linda J. Docherty, A.B. (Cornell), A.M. (Chicago), Ph.D. (North Catolina), Associate Professor of Art History. (1986)

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. (2011)
Danielle H. Dube, B.A. (Cornell), Ph.D. (California-Berkeley), Assistant Professor of Chemistry and Biochemistry. (On leave of absence for the fall semester.) (2007)
Brian Duff, B.A. (North Carolina-Chapel Hill), M.A., Ph.D. (California-Berkeley), Coastal Studies Scholar. (2011)
Alicia Eggert, B.S. (Drexel), M.F.A. (Alfred), Assistant Professor of Art. (2010)
Glen G. Ernstrom, M.A. (Brandeis), Ph.D. (Columbia), Visiting Assistant Piofessor of Biology. (2011)

Andrew F. Erwin, B.A. (Arkansas Tech), M.A. (Arkansas), Ph.D. (Chicago), Visiting Assistant Professor of German. (2011)
Gustavo Faverón-Patriau, B.A., Lic. (Pontificia Universidad Católica del Perú), M.A., Ph.D. (Cornell), Associate Professor of Romance Languages. (2005)
Kelly N. Fayard, B.A. (Duke), M.A. (Michigan), Instructor in Anthropology.* (2011)
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), Associate Professor of Art History. (2001)
Lori Flores, B.A (Yale), M.A., Ph.D. (Stanford), CFD Postdoctoral Fellow and Lecturer in History. (2011)

Tomas Fortson, Coach in the Department of Athletics. (2000)
Guy Mark Foster, B.A. (Wheaton), M.A., Ph.D. (Brown), Assistant 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.) (2000)

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), Lecturer in Italian. (2008)
Eric C. Gaze, B.A. (Holy Cross), M.A., Ph.D. (Massachusetts-Amherst), Director of Quantitative Reasoning. (2009)
Megs S. Gendreau, B.A. (Hampshire), M.A. (California-Santa Cruz), Ph.D. (CaliforniaRiverside), Andrew F. Mellon Postdoctoral Fellow in Environmental Studies. (2011)
Kristen R. Ghodsee, B.A. (California-Santa Cruz), M.A., Ph.D. (California-Berkeley), John S. Osterweis Associate Professor of Gender and Women's Studies. (2002)
Timothy J. Gilbride, A.B. (Providence), M.P. (American International), Coach in the Department of Athletics. (1985)

## Officers of Instruction

Natasha Goldman, B.A. (Syracuse), M.A., Ph.D. (Rochester), Adjunct Lecturer in Art History. (Fall semester.) (2011)
Jonathan P. Goldstein, A.B. (New York-Buffalo), A.M., Ph.D. (Massachusetts), Professor of Economics. (1979)

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), Associate Professor of History. (2005)
Benjamin C. Gorske, B.M., B.A. (Lawrence University), Ph.D. (Wisconsin-Madison), Assistant Professor of Chemistry and Biochemistry. (2010)

Yi Jin Kim Gorske, B.A. (California-Berkeley), Ph.D. (Wisconsin-Madison), Visiting Assistant Professor of Chemistry. (2011)

Meggan Gould, B.A. (North Carolina-Chapel Hill), M.F.A. (Massachusetts-Dartmouth), Visiting Assistant Professor of Art. (2006)
Robert K. Greenlee, B.M., M.M. (Oklahoma), D.M. (Indiana), Professor of Music. (1982)
Charlotte Griffin, B.F.A. (Juilliard), M.F.A. (Texas-Austin), Assistant Professor of Dance. (2010)

Elizabeth Grote, B.S. (Vermont), M.S. (New Hampshire), Coach in the Department of Athletics. (2002)

Stephen Grover, B.M. (Maine-Augusta), Director of Jazz Ensembles. (2011)
Leon Harkleroad, B.S. (George Mason), Ph.D. (Notre Dame), Adjunct Lecturer in Mathematics. (Spring semester.)

Bradley A. Hartlaub, B.A. (Millersville), M.S., Ph.D. (Ohio), Visiting Professor of
Mathematics. (Fall semester.) (2011)
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 Professor of Psychology and Social Studies. (Fall semester.) (1979)

Laura A. Henry, B.A. (Wellesley), M.A., Ph.D. (California-Berkeley), John F. and Dorothy H. Magee Associate Professor of Government. (On leave of absence for the academic year.) (2004)
Guillermo Herrera, A.B. (Harvard), M.S., M.A., Ph.D. (Washington), Associate Professor of Economics. (On leave of absence for the academic year.) (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. (Washington), Instructor in Government and Asian Studies.* (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, Associate Dean for Academic Affairs, and Associate Affirmative Action Officer. (1994)

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), Lecturer in Asian Studies (fall sememster) 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. (On leave of absence for the academic year.) (2001)
David J. Howlett, B.S.E. (Central Missouri), M.A. (Missouri-Kansas City), Ph.D. (Iowa), Andrew W. Mellon Postdoctoral Fellow in Religion. (2011)

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

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), Assistant Professor of Biology. (2007)
Seth N. Jaffe, A.B. (Bowdoin), M.S. (London School of Economics), Visiting Instructor in Government.* (2010)

Nancy E. Jennings, B.A. (Macalester), M.S. (Illinois-Urbana-Champaign), Ph.D. (Michigan State), Associate Professor of Education and Senior Faculty Fellow in the Joseph McKeen Center for the Common Good. (1994)
DeWitt John, B.A. (Harvard), M.A., Ph.D. (Chicago), Thomas F. Shannon Distinguished Lecturer in Environmental Studies. (On leave of absence for the spring semester.) (2000)

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

Eileen Johnson, B.S. (Cornell), M.A. (Massachusetts-Amherst), Adjunct Lecturer in Environmental Studies (fall semester) and Program Manager/GIS Analyst. (2007)
Gwyneth Jones, Senior Lecturer in Dance Performance. (On leave of absence for the fall semester.) (1987)

Cristle Collins Judd, B.M., M.M. (Rice), M.Mus., Ph.D. (London), Professor of Music and Dean for Academic Affairs. (2006)

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. (On leave of absence for the academic year.) (1985)
Jay Ketner, B.A. (Georgia), M.A. (Vermont), Ph.D. (Minnesota), Visiting Assistant Professor of Romance Languages. (2011)
B. Zorina Khan, B.Sc. (University of Surrey), M.A. (McMaster University), Ph.D. (CaliforniaLos Angeles), Professor of Economics. (1996)
Ann L. Kibbie, B.A. (Boston), Ph.D. (California-Berkeley), Associate Professor of English. (1989)

## Officers of Instruction

Abigail Killeen, B.F.A. (New York University-Tisch School), M.F.A. (Brandeis), Assistant Professor of Theater. (2008)
Angus S. King, A.B. (Dartmouth), L.L.B. (Virginia), Distinguished Lecturer. (2004)
Michael King, B.A. (Yale), M.S., Ph.D. (Brown), Visiting Assistant Professor of Mathematics. (2009)

Aaron W. Kitch, B.A. (Yale), M.A. (Colorado-Boulder), Ph.D. (Chicago), Associate Professor of English. (2002)

Matthew W. Klingle, B.A. (California-Berkeley), M.A., Ph.D. (Washington), Associate Professor of History and Environmental Studies. (On leave of absence for the academic year.) (2001)

Jane E. Knox-Voina, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas-Austin), Professor of Russian. (On leave of absence for the spring semester.) (1976)
Bruce D. Kohorn, B.A. (Vermont), M.S., Ph.D. (Yale), Linnean Professor of Biology and Biochemistry. (On leave of absence for the academic year.) (2001)

Michael Kolster, B.A. (Williams), M.F.A. (Massachusetts College of Art), Associate Professor of Art. (On leave of absence for the academic year.) (2000)
Belinda Kong, B.A. (William and Mary), M.A., Ph.D. (Michigan), Assistant Professor of Asian Studies and English. (2005)
Jennifer Clarke Kosak, A.B. (Harvard-Radcliffe), Ph.D. (Michigan), Associate Professor of Classics. (On leave of absence for the academic year.) (1999)

Edward P. Laine, A.B. (Wesleyan), Ph.D. (Woods Hole and Massachusetts Institute of Technology), Associate Professor of Earth and Oceanographic Science. (1985)
Rachel Larsen, B.A. (Vassar), M.S., Ph.D. (Illinois-Urbana-Champaign), Visiting Assistant Professor of Biology. (2010)

Henry C. W. Laurence, B.A. (Oxford), Ph.D. (Harvard), Associate Professor of Government and Asian Studies. (1997)

Peter D. Lea, A.B. (Dartmouth), M.S. (Washington), Ph.D. (Colorado-Boulder), Associate Professor of Earth and Oceanographic Science. (On leave of absence for the academic year.) (1988)

De-nin Deanna Lee, B.A. (California-Berkeley), M.A. (Williams), Ph.D. (Stanford), Assistant Professor of Art History and Asian Studies. (2003)

Daniel Levine, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science Emeritus. (Fall semester.) (1963)
Adam B. Levy, B.A. (Williams), Ph.D. (Washington), Professor of Mathematics. (1994)
John Lichter, B.S. (Northern Illinois), Ph.D. (Minnesota), Samuel S. Butcher Associate Professor in the Natural Sciences. (2000)

Barry A. Logan, B.A. (Cornell), Ph.D. (Colorado), Professor of Biology. (1998)
George Lopez, B.Mus. (Hartt School of Music), M.Mus. (Sweelinck ConservatoriumAmsterdam), Visiting Artist in Residence. (2010)
Suzanne B. Lovett, A.B. (Bowdoin), Ph.D. (Stanford), Associate Professor of Psychology and Faculty Liaison for Advising. (1990)

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. (On leave of absence for the academic year.) (2000)

Lisa Mangiamele, B.A. (Colgate), Ph.D. (North Carolina-Chapel Hill), Postdoctoral Fellow in Neuroscience. (2010)
Janet M. Martin, A.B. (Marquette), M.A., Ph.D. (Ohio State), Professor of Government. (1986)

Naho Maruta, B.A. (Kansal Gaidai University-Japan), M.A. (Wisconsin-Madison), Lecturer in Japanese Language. (2011)
Katherine M. Mathis, B.A. (Siena), M.A., Ph.D. (SUNY-Albany), Visiting Assistant Professor of Psychology. (2011)

Frank Mauceri, B.A., B.M. (Oberlin), M.M., D.M.A. (Illinois-Urbana-Champaign), Lecturer in Music. (On leave of absence for the academic year.) (2003)
Aba Mbirika, B.A. (Sonoma State), M.S., Ph.D. (Iowa), Postdoctoral Fellow in Mathematics. (2010)

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

Thomas E. McCabe Jr., B.S., M.S. (Springfield College), Coach in the Department of Athletics. (1990)

James W. McCalla, B.A., B.M. (Kansas), M.M. (New England Conservatory), Ph.D.
(California-Berkeley), Associate Professor of Music. (On leave of absence for the fall semester.) (1985)

Nyama McCarthy-Brown, B.A. (Spelman), M.F.A. (Michigan), Ph.D. (Temple), CFD Postdoctoral Fellow and Lecturer in Dance Performance. (2011)

Daphne McCoy, B.A. (Central Oklahoma), M.F.A. (Illinois), Adjunct Lecturer in Dance. (Fall semester.) (2010)
Craig A. McEwen, A.B. (Oberlin), A.M., Ph.D. (Harvard), Daniel B. Fayerweather Professor of Political Economy and Sociology and Senior Faculty Fellow in the Joseph McKeen Center for the Common Good. (On leave of absence for the spring semester.) (1975)
Sarah F. McMahon, A.B. (Wellesley), Ph.D. (Brandeis), Associate Professor of History. (On leave of absence for the spring semester.) (1982)
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, B.A. (Bowdoin), M.A., Ph.D. (Duke), Assistant Professor of Economics. (On leave of absence for the academic year.) (2008)
Raymond H. Miller, A.B. (Indiana), A.M., Ph.D. (Harvard), Associate Professor of Russian. (1983)

Benjamin A. Moodie, B.A. (Yale), M.A., Ph.D. (California-Berkeley), Adjunct Lecturer in Sociology. (Fall semester.) (2011)
Richard E. Morgan, A.B. (Bowdoin), A.M., Ph.D. (Columbia), William Nelson Cromwell Professor of Constitutional and International Law and Government. (1969)

John Morneau, B.M. (New Hampshire), Director of the Bowdoin Concert Band. (Adjunct.) (1988)

## Officers of Instruction

Robert G. Morrison, A.B., A.M. (Harvard), Ph.D. (Columbia), Associate Professor of Religion. (2008)
Madeleine E. Msall, B.A. (Oberlin), M.A., Ph.D. (Illinois-Urbana-Champaign), Professor of Physics. (On leave of absence for the academic year.) (1994)

James Mullen, B.F.A. (New Hampshire), M.F.A. (Indiana), Associate Professor of Art. (1999)
Dhiraj Murthy, B.A. (Claremont McKenna), M.S. (Bristol), M.S. (London School of Economics), Ph.D. (Cambridge), Assistant Professor of Sociology. (On leave of absence for the academic year.) (2008)

Elizabeth Muther, B.A. (Wellesley), Ph.D. (California-Berkeley), Associate Professor of English. (On leave of absence for the fall semester.) (1993)
Stephen G. Naculich, B.S. (Case Western Reserve), M.A., Ph.D. (Princeton), Professor of Physics. (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), Visiting Assistant Professor of Classics. (2008)

Mitsuko Numata, A.S. (Genesee Community College), B.A. (SUNY-Buffalo), M.A. (Iowa), Lecturer in Japanese. (2009)

James Stephen O’Connor, B.A. (Yale), M.Phil. (Oxford), M.Phil., Ph.D. (Columbia), Visiting Assistant Professor of Classics. (2011)

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

Francis O'Leary, B.A. (Thomas Edison State College), Coach in the Department of Athletics. (2005)

Daniela A. S. de Oliveira, B.S., M.S. (Federal University of Minas Gerais-Brazil), Ph.D. (California-Davis), Assistant Professor of Computer Science. (2010)

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

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), 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), Associate Professor of Art History. (2002)
Emily M. Peterman, B.A. (Middlebury), Ph.D. (California-Santa Barbara), Assistant Professor of Earth and Oceanographic Science. (Spring semester.) (2012)
Carey R. Phillips, B.S. (Oregon State), M.S. (California-Santa Barbara), Ph.D. (WisconsinMadison), Professor of Biology. (On leave of absence for the spring semester.) (1985)

Thomas Pietraho, B.A., M.S. (Chicago), Ph.D. (Massachusetts Institute of Technology), Associate Professor of Mathematics. (On leave of absence for the spring semester.) (2001)
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 of absence for the academic year.) (1998)
Brian Purnell, B.A. (Fordham), M.A., Ph.D. (New York University), Assistant Professor of Africana Studies. (2010)
Samuel P. Putnam, B.S. (Iowa), M.S., Ph.D. (Pennsylvania State), Associate Professor of Psychology. (On leave of absence for the academic year.) (2001)
Patrick J. Rael, B.A. (Maryland-College Park), M.A., Ph.D. (California-Berkeley), Associate Professor of History. (On leave of absence for the academic year.) (1995)
Seth J. Ramus, B.A. (California-Berkeley), M.A., Ph.D. (California-San Diego), Assistant Professor of Psychology and Neuroscience. (2002)
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. (On leave of absence for the academic year.) (1984)
Manuel L. Reyes, B.S. (Westmont), Ph.D. (Berkeley), Assistant Professor of Mathematics. (2011)

Nancy E. Riley, B.A. (Pennsylvania), M.P.H., M.A. (Hawai i), Ph.D. (Johns Hopkins), Professor of Sociology. (1992)
Desdamona Rios, B.A. (California State-Northridge), Ph.D. (Michigan), CFD Postdoctoral Fellow and Lecturer in Psychology and Gender and Women's Studies. (2010)
Maria Elena Rivera-Beckstrom, B.A. (Maryknoll), M.A., Ph.D. (New School for Social Research), Visiting Assistant Professor of Sociology. (2011)
Trevor Rivers, B.S (Western Washington), Ph.D. (Cornell), Doherty Marine Biology
Postdoctoral Scholar. (2011)
Meghan K. Roberts, B.A. (William and Mary), Ph.D. (Northwestern), Assistant Professor of History. (2011)
Rosemary A. Roberts, B.A. (University of Reading), M.Sc., Ph.D. (University of Waterloo), Professor of Mathematics. (1984)
Strother E. Roberts, B.S., M.A. (Kansas State), M.A., Ph.D. (Northwestern), Visiting Assistant Professor of History. (2011)
Davis R. Robinson, B.A. (Hampshire), M.F.A. (Boston University), Professor of Theater. (On leave of absence for the spring semester.) (1999)

## Officers of Instruction

Kimberly J. Robinson, B.A. (Southern Maine), M.S., Ph.D. (Rutgers), Visiting Assistant Professor of Psychology. (2010)

Collin Roesler, B.S. (Brown), M.S. (Oregon State), Ph.D. (Washington), Associate Professor of Earth and Oceanographic Science. (2009)

Maren Rojas, B.A. (William and Mary), M.Ed. (Syracuse), Coach in the Department of Athletics. (2007)

Lynn M. Ruddy, B.S. (Wisconsin-Oshkosh), Associate Director of Athletics and Coach in the Department of Athletics. (1976)

Rajarshi Saha, B.S. (Bates), M.S., Ph.D. (North Carolina-Chapel Hill), Ed Lorenz Postdoctoral Fellow in the Mathematics of Climate Change. (2011)

Arielle Saiber, B.A. (Hampshire), M.A., Ph.D. (Yale), Associate Professor of Romance Languages. (1999)
Roberto Salgado, B.S. (SUNY-Stony Brook), M.S. (Chicago), Ph.D. (Syracuse), Visiting Assistant Professor of Physics. (2010)

James A. St. Pierre, B.S. (Maine-Orono), M.S. (Wisconsin), Coach in the Department of Athletics. (2001)

Doris A. Santoro, B.A. (Rochester), Ed.D. (Columbia), Assistant Professor of Education. (2005)

Paul Sarvis, B.A., M.F.A. (Goddard), Senior Lecturer in Dance Performance. (On leave of absence for the spring semester.) (1987)

Carrie Scanga, B.A. (Bryn Mawr), M.F.A. (Washington-Seattle), Assistant Professor of Art. (2009)

Jennifer Scanlon, B.S. (SUNY-Oneonta), M.A. (Delaware), M.A., Ph.D. (Binghamton), William R. Kenan Professor of Gender and Women's Studies. (2002)

Paul E. Schaffner, A.B. (Oberlin), Ph.D. (Cornell), Associate Professor of Psychology. (1977)
Michael Schiff-Verre, B.S.W. (Southern Maine), Adjunct Lecturer in Theater and Technical Director/Resident Lighting Designer. (2003)

Conrad Schneider, B.A. (North Carolina), J.D. (Virginia), Adjunct Lecturer in Environmental Studies. (Fall semester.) (2009)

Scott R. Sehon, B.A. (Harvard), M.A., Ph.D. (Princeton), Professor of Philosophy. (1993)
Jeffrey S. Selinger, B.A. (Rutgers), M.A., Ph.D. (Cornell), Assistant Professor of Government. (2007)

Vyjayanthi Ratnam Selinger, B.A. (Jawaharlal Nehru University, India), M.A. (Harvard), Ph.D. (Cornell), Assistant Professor of Asian Studies. (On leave of absence for the spring semester.) (2005)

Leslie C. Shaw, B.A. (Maine-Orono), M.A. (Wyoming-Laramie), Ph.D. (MassachusettsAmherst), Visiting Assistant Professor of Anthropology. (Fall semester.)

Vineet Shende, B.A. (Grinnell), M.A. (Butler), Ph.D. (Cornell), Associate Professor of Music. (2002)

Adrienne Shibles, B.A. (Bates), M.S. (Smith), Coach in the Department of Athletics. (2008)

Lawrence H. Simon, A.B. (Pennsylvania), A.B. (Oxford), M.A./B.A. (Cambridge), Ph.D. (Boston University), Associate Professor of Philosophy and Environmental Studies. (On leave of absence for the academic year.) (1987)

Peter Slovenski, A.B. (Dartmouth), A.M. (Stanford), Coach in the Department of Athletics. (1987)

Louisa M. Slowiaczek, B.S. (Massachusetts), Ph.D. (Indiana), Professor of Psychology. (On leave of absence for the academic year.) (1998)

Jill S. Smith, B.A. (Amherst), M.A., Ph.D. (Indiana-Bloomington), Assistant Professor of German. (2006)

Robert B. Sobak, A.B. (Franklin and Marshall), M.A. (Georgia), M.A., Ph.D. (Princeton), Assistant Professor of Classics. (On leave of absence for the academic year.) (2007)

Allen L. Springer, A.B. (Amherst), M.A., M.A.L.D., Ph.D. (Tufts), Professor of Government. (1976)

Daniel M. Steffenson, A.B. (Cornell College-Iowa), A.M., Ph.D. (Harvard), Visiting Professor of Chemistry. (2010)

Elizabeth A. Stemmler, B.S. (Bates), Ph.D. (Indiana), Professor of Chemistry. (1988)
Matthew F. Stuart, B.A. (Vermont), M.A., Ph.D. (Cornell), Associate Professor of Philosophy. (1993)

Rachel L. Sturman, B.A. (Chicago), M.A., Ph.D. (California-Davis), Associate Professor of History and Asian Studies. (2003)

Ryan Sullivan, B.A. (Middlebury), Coach in the Department of Athletics. (2001)
Dale A. Syphers, B.S., M.Sc. (Massachusetts), Ph.D. (Brown), Professor of Physics. (1986)
Jennifer Taback, B.A. (Yale), M.A., Ph.D. (Chicago), Associate Professor of Mathematics. (2002)

Mohammad Tajdari, B.S, M.S., Ph.D. (Florida State), Visiting Assistant Professor of Mathematics. (Spring semester.) (2005)

Susan L. Tananbaum, B.A. (Trinity), M.A., M.A., Ph.D. (Brandeis), Associate Professor of History. (1990)

Yao Tang, B.A. (Beijing Second Foreign Language Institute), M.A. (Simon Fraser), Ph.D. (British Columbia), Assistant Professor of Economics. (2009)

Birgit Tautz, Diplom Germanistik (Leipzig), M.A. (Wisconsin), Ph.D. (Minnesota), Associate Professor of German. (On leave of absence for the academic year.) (2002)

Hilary J. Thompson, B.A. (Toronto), M.A., Ph.D. (Michigan), Assistant Professor of English. (2009)

Richmond R. Thompson, B.S. (Furman), Ph.D. (Cornell), Professor of Psychology and Neuroscience. (1999)

Nicholas Toloudis, B.A. (Johns Hopkins), M.A., Ph.D. (Columbia), Visiting Assistant Professor of Government. (2011)

Laura I. Toma, B.S., M.S. (Universitatea Politehnica Bucuresti), M.S., Ph.D. (Duke), Associate Professor of Computer Science. (2003)

Officers of Instruction
Karen Topp, B.Sc. (Queen's University, Kingston, Ontario), Ph.D. (Cornell), Lecturer in Physics. (2005)
Shu-chin Tsui, B.A. (Xian Foreign Language Institute, China), M.A. (Wisconsin), M.A., Ph.D. (Michigan), Associate Professor of Asian Studies. (2002)

Esmeralda A. Ulloa, B.A. (California-Irvine), A.M. (Harvard), Visiting Instructor in Romance Languages.* (2008)
Krista E. Van Vleet, B.S. (Beloit), M.A., Ph.D. (Michigan), Associate Professor of Anthropology. (1999)
William C. VanderWolk, A.B. (North Carolina), A.M. (Middlebury), Ph.D. (North Carolina), Henry Wadsworth Longfellow Professor of Modern Languages and Associate Dean for Faculty Development. (1984)
Dharni Vasudevan, B.S. (Massachusetts Institute of Technology), M.S., Ph.D. Johns Hopkins), Associate Professor of Chemistry and Environmental Studies. (2003)

Olufemi O. Vaughan, B.A., M.A. (St. John's), Ph.D. (Oxford), Geoffrey Canada Professor of Africana Studies and History. (2008)
Roland Vazquez, B.A., M.A. (CUNY), M.A., Ph.D. (Cornell), Director of Chamber Ensembles. (Adjunct.) (2004)
Hanétha Vété-Congolo, B.A., M.A., Ph.D. (Université des Antilles et de la Guyane), Associate Professor of Romance Languages. (On leave of absence for the academic year.) (2001)
Anthony E. Walton, B.A. (Notre Dame), M.F.A. (Brown), Writer in Residence. (1995)
Jeffrey H. Ward, A.B. (Dartmouth), M.A. (Columbia), Ashmead White Director of Athletics. (1998)

Christopher Watkinson, A.A. (Full Sail School of Recording), B.A. (Southern Maine), Adjunct Lecturer in Music and Recital Hall Technician. (2007)

William C. Watterson, A.B. (Kenyon), Ph.D. (Brown), Edward Little Professor of the English Language and Literature. (1976)

Susan E. Wegner, A.B. (Wisconsin-Madison), A.M., Ph.D. (Bryn Mawr), Associate Professor of Art History. (1980)

Allen Wells, A.B. (SUNY-Binghamton), A.M., Ph.D. (SUNY-Stony Brook), Roger Howell Jr. Professor of History. (1988)

Tricia Welsch, B.A. (Fordham), M.A., Ph.D. (Virginia), Associate Professor of Film Studies on the Marvin H. Green Jr. Fund. (1993)

Mark C. Wethli, B.F.A., M.F.A. (Miami), A. LeRoy Greason Professor of Art. (1985)
Eugenia Wheelwright, B.A. (Yale), M.A. (Washington), Lecturer in Romance Languages. (2005)

Nathaniel T. Wheelwright, B.S. (Yale), Ph.D. (Washington), Anne T. and Robert M. Bass Professor of Natural Sciences. (1986)
Osceola Whitney, B.S. (Lincoln-Pennsylvania), Ph.D. (Florida State), Visiting Assistant Professor of Biology and Neuroscience. (2011)

Carolyn Wolfenzon, B.A. (University of Lima-Peru), M.A. (Colorado-Boulder), Ph.D. (Cornell), Visiting Assistant Professor of Romance Languages. (2007)

Yuxia Xiu, B.A. (Yantai Normal University), M.A. (Beijing Language and Culture University), Lecturer in Chinese Language. (2011)
Jean M. Yarbrough, A.B. (Cedar Crest College), A.M., Ph.D. (New School for Social Research), Gary M. Pendy Sr. Professor of Social Sciences. (1988)

Enrique Yepes, B.A. (Universidad Pontificia Bolivariana), Ph.D. (Rutgers), Peter M. Small Associate Professor of Romance Languages. (1996)

Mary Lou Zeeman, B.A., M.A. (Oxford), Ph.D. (California-Berkeley), R. Wells Johnson Professor of Mathematics. (2006)

## Officers of Instruction Emeriti

John W. Ambrose Jr., A.B., A.M., Ph.D. (Brown), Joseph Edward Merrill Professor of Greek Language and Literature Emeritus. (1966)

Ray Stuart Bicknell, B.S., M.S. (Springfield), Coach in the Department of Athletics Emeritus. (1962)

Franklin G. Burroughs Jr., A.B. (University of the South), A.M., Ph.D. (Harvard), Harrison King McCann Professor Emeritus of the English Language. (1968)

Samuel Shipp Butcher, A.B. (Albion), A.M., Ph.D. (Harvard), Professor of Chemistry Emeritus. (1964)

Charles J. Butt, B.S., M.S. (Springfield), Coach in the Department of Athletics Emeritus. (1961)

Helen L. Cafferty, A.B. (Bowling Green), A.M. (Syracuse), Ph.D. (Michigan), William R. Kenan Jr. Professor of German and the Humanities Emerita. (1972)

Denis J. Corish, B.Ph., B.A., L.Ph. (Maynooth College, Ireland), A.M. (University College, Dublin), Ph.D. (Boston University), Professor of Philosophy Emeritus. (1973)
John D. Cullen, A.B. (Brown), Coach in the Department of Athletics Emeritus. (1985)
Robert Hazard Edwards, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Bowdoin, Carleton), President of the College Emeritus. (1990)
Guy T. Emery, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Professor of Physics Emeritus. (1988)
A. Myrick Freeman III, A.B. (Cornell), A.M., Ph.D. (Washington), William D. Shipman Professor of Economics Emeritus. (1965)
Alfred H. Fuchs, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Professor of Psychology Emeritus. (1962)
Edward S. Gilfillan III, A.B. (Yale), M.Sc., Ph.D. (British Columbia), Adjunct Professor of Chemistry and Lecturer in the Environmental Studies Program Emeritus.
William Davidson Geoghegan, A.B. (Yale), M.Div. (Drew), Ph.D. (Columbia), Professor of Religion Emeritus. (1954)

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D.Litt. (Wesleyan), L.H.D. (Colby), L.H.D. (Bowdoin), L.H.D. (Bates), President of the College and Professor of English Emeritus. (1952)

Charles A. Grobe Jr., B.S., M.S., Ph.D. (Michigan), Professor of Mathematics Emeritus. (1964)

## Officers of Instruction

James L. Hodge, A.B. (Tufts), A.M., Ph.D. (Pennsylvania State), George Taylor Files Professor of Modern Languages and Professor of German Emeritus. (1961)

Charles Ellsworth Huntington, B.A., Ph.D. (Yale), Professor of Biology Emeritus and Director of the Bowdoin Scientific Station at Kent Island Emeritus. (1953)

Arthur M. Hussey II, B.S. (Pennsylvania State), Ph.D. (Illinois), Professor of Geology Emeritus. (1961)
R. Wells Johnson, A.B. (Amherst), M.S., Ph.D. (Massachusetts Institute of Technology), Isaac Henry Wing Professor of Mathematics Emeritus. (1964)
C. Michael Jones, A.B. (Williams), Ph.D. (Yale), Associate Professor of Economics Emeritus. (1987)

John Michael Karl, A.B., A.M., Ph.D. (Harvard), Associate Professor of History Emeritus. (1968)

Barbara Jeanne Kaster, A.B. (Texas Western), M.Ed. (Texas-El Paso), Ph.D. (Texas-Austin), Harrison King McCann Professor of Communication in the Department of English Emerita. (1973)

Elroy Osborne LaCasce Jr., A.B. (Bowdoin), A.M. (Harvard), Ph.D. (Brown), Professor of Physics Emeritus. (1947)
Mortimer Ferris LaPointe, B.S. (Trinity), M.A.L.S. (Wesleyan), Coach in the Department of Athletics Emeritus. (1969)

Daniel Levine, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science Emeritus. (1963)

Mike Linkovich, A.B. (Davis and Elkins), Trainer Emeritus in the Department of Athletics. (1954)

Burke O. Long, A.B. (Randolph-Macon), B.D., A.M., Ph.D. (Yale), Kenan Professor of the Humanities Emeritus. (1968)

Larry D. Lutchmansingh, A.B. (McGill), A.M. (Chicago), Ph.D. (Cornell), Associate Professor of Art History Emeritus. (1974)
T. Penny Martin, A.B., A.M. (Middlebury), M.A.T., Ed.D. (Harvard), Associate Professor of Education Emerita. (1988)

Dana W. Mayo, B.S. (Massachusetts Institute of Technology), Ph.D. (Indiana), Charles Weston Pickard Professor of Chemistry Emeritus. (1962)
O. Jeanne d'Arc Mayo, B.S., M.Ed. (Boston), Physical Therapist and Trainer Emerita in the Department of Athletics. (1978)

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

Robert R. Nunn, A.B. (Rutgers), A.M. (Middlebury), Ph.D. (Columbia), Associate Professor of Romance Languages Emeritus. (1959)

Clifton C. Olds, A.B. (Dartmouth), A.M., Ph.D. (Pennsylvania), Edith Cleaves Barry Professor of the History and Criticism of Art Emeritus. (1982)
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)
James Daniel Redwine Jr., A.B. (Duke), A.M. (Columbia), Ph.D. (Princeton), Edward Little Professor of the English Language and Literature Emeritus. (1963)
Edward Thomas Reid, Coach in the Department of Athletics Emeritus. (1969)
John Cornelius Rensenbrink, A.B. (Calvin), A.M. (Michigan), Ph.D. (Chicago), Professor of Government Emeritus. (1961)
Guenter Herbert Rose, B.S. (Tufts), M.S. (Brown), Ph.D. (California-Los Angeles), Associate Professor of Psychology and Psychobiology Emeritus. (1976)
Daniel W. Rossides, B.A., Ph.D. (Columbia), Professor of Sociology Emeritus. (1968)
Abram Raymond Rutan, A.B. (Bowdoin), M.F.A. (Yale), Director of Theater Emeritus. (1955)

Elliott S. Schwartz, A.B., A.M., Ed.D. (Columbia), Robert K. Beckwith Professor of Music Emeritus. (1964)
C. Thomas Settlemire, B.S., M.S. (Ohio State), Ph.D. (North Catolina State), Professor of Biology and Chemistry Emeritus. (1969)
William Davis Shipman, A.B. (Washington), A.M. (California-Berkeley), Ph.D. (Columbia), Adams-Catlin Professor of Economics Emeritus. (1957)
Melinda Y. Small, B.S., A.M. (St. Lawrence), Ph.D. (Iowa), Professor of Psychology Emerita. (1972)

Kidder Smith Jr., A.B. (Princeton), Ph.D. (California-Berkeley), Professor of History and Asian Studies Emeritus. (1981)

Randolph Stakeman, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Associate Professor of History and Africana Studies Emeritus. (1978)
William L. Steinhart, A.B. (Pennsylvania), Ph.D. (Johns Hopkins), Linnean Professor of Biology Emeritus. (1975)
Allen B. Tucker Jr., A.B. (Wesleyan), M.S., Ph.D. (Northwestern), Anne T. and Robert M. Bass Professor of Natural Sciences Emeritus. (1988)
James H. Turner, A.B. (Bowdoin), B.S., M.S., Ph.D. (Massachusetts Institute of Technology), Associate Professor of Physics Emeritus. (1964)
John H. Turner, A.M. (St. Andrews, Scotland), A.M. (Indiana), Ph.D. (Harvard), Professor of Romance Languages Emeritus. (1971)

David J. Vail, A.B. (Princeton), M.A., Ph.D. (Yale), Adams-Catlin Professor of Economics Emeritus. (1970)
June A. Vail, A.B. (Connecticut), M.A.L.S. (Wesleyan), Professor of Dance Emerita. (1987)
Howard S. Vandersea, A.B. (Bates), M.Ed. (Boston), Coach in the Department of Athletics Emeritus. (1984)
James E. Ward, A.B. (Vanderbilt), A.M., Ph.D. (Virginia), Professor of Mathematics Emeritus. (1968)

## Instructional and Research Staff

Peter John Bakewell, B.A., M.A., Ph.D. (Cambridge), Research Associate in History.
Tristan Bayard-Massot, Teaching Fellow in French.
Rene L. Bernier, B.S. (Maine), Laboratory Instructor in Chemistry, Laboratory Support Manager, and Manager of Science Center.
Martha B. Black, B.S., M.S. (Massachusetts Institute of Technology), Laboratory Instructor in Chemistry.

Pamela J. Bryer, B.S., M.S. (Rensselaer Polytechnic Institute), Laboratory Instructor in Biology and Director of Laboratories.

Neslihan Bulut, Teaching Fellow in German.
Michael L. Cain, A.B. (Bowdoin), M.Sc. (Brown), Ph.D. (Cornell), Research Associate in Biology and Mathematics.
Nelson Felipe Castañeda-Rojas, Teaching Fellow in Spanish.
John Milton Cooper Jr., A.B. (Princeton), M.A., Ph.D. (Columbia), Research Associate in History.
Nancy Curtis, B.A., M.S. (Maine-Orono), Laboratory Instructor in Biology.
Annelle Curulla, B.A. (Connecticut College), M.A., Ph.D. (Columbia), Research Associate in Romance Languages.
Caroline Denigot, Teaching Fellow in French.
Kenneth A. Dennison, B.A. (Williams), M.S. (Cornell), Laboratory Instructor in Physics.
Beverly G. DeCoster, B.S. (Dayton), Laboratory Instructor in Chemistry.
Robert de Levie, M.S., Ph.D. (University of Amsterdam), Research Associate in Chemistry.
Mary Agnes Edsall, B.A., M.A., Ph.D. (Columbia), Research Associate in English.
Aimee Eldridge, B.A. (Wooster), Ph.D. (Oregon), Research Associate in Chemistry.
Olaf Ellers, B.Sc. (Toronto), Ph.D. (Duke), Research Associate in Mathematics and Biology.
Kate Farnham, B.S., M.S. (Maine), Laboratory Instructor in Biology.
Cathryn K. Field, B.A. (Connecticut), M.S. (Smith), Service Learning Coordinator and Laboratory Instructor in Earth and Oceanographic Science.
Anja Forche, B.S. equiv., Ph.D. (Humboldt-University of Berlin), Research Assistant Professor of Biology.
Judith C. Foster, A.B. (Brown), M.Sc. (Rhode Island), Laboratory Instructor in Chemistry and Director of Laboratories.

Janet G. Gannon, B.A. (Miami University), M.S. (Michigan), M.Ed. (Harvard), Laboratory Instructor in Biology.
Natasha Goldman, B.A. (Syracuse), M.A., Ph.D. (Rochester), Research Associate in Art
History. (Spring semester.)
Leon Harkleroad, B.S. (George Mason), Ph.D. (Notre Dame), Research Associate in Mathematics. (Fall semester.)

Stephen Hauptman, B.A. (Connecticut College), M.A. (Illinois), M.Sc. (Cornell), Laboratory Instructor in Biology.

Janice Jaffe, B.A. (University of the South), M.A., Ph.D. (Wisconsin-Madison), Research Associate in Latin American Studies.

Thornton C. Kline, A.B. (Dartmouth), M.A. (Chicago), Ph.D. (Stanford), Research Associate in Asian Studies.

Loraine Kohorn, B.A. (Brown), Ph.D. (California-Los Angeles), Research Associate in Biology.
Normand M. Laurendeau, B.S. (Notre Dame), M.S.E. (Princeton), Ph.D. (CaliforniaBerkeley), Research Associate in Chemistry.
Colleen T. McKenna, B.A. (Southern Maine), Laboratory Instructor in Chemistry.
Paulette M. Messier, A.B. (Maine-Presque Isle), Laboratory Instructor in Chemistry.
Gary L. Miers, B.S. (Lafayette College), Laboratory Instructor in Physics.
Jaret S. Reblin, B.S. (Baldwin-Wallace College), M.S. (John Carroll), Laboratory Instructor in Biology.

Ryan Ricciardi, A.B. (Bowdoin), M.A., Ph.D. (Cincinnati), Research Associate in Classics.
Elizabeth Koski Richards, B.A. (Maine-Augusta), M.A., Ph.D. (Southern Maine), Laboratory Instructor in Biology.

Peter E. Schlax Jr., B.A. (Illinois-Urbana-Champaign), Ph.D. (Wisconsin-Madison), Laboratory Instructor in Biology.

Mohammad Tajdari, B.S., M.S., Ph.D. (Florida State), Research Associate in Mathematics. (Fall semester.)

William B. Taylor, B.A. (Occidental), M.A. (University of the Americas), Ph.D. (Michigan), Research Associate in History.
Joanne Urquhart, B.S. (State University of New York), M.S. (Dartmouth), Laboratory Instructor in Earth and Oceanographic Science.

Loraine Washburn, B.A. (Brown), Ph.D. (California-Los Angeles), Research Associate in Biology.

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Admissions Office
Bowdoin College 5000 College Station
Brunswick, MĐ
04011-8441


[^0]:    * These departments and programs offer only a minor.

[^1]:    [Gay and Lesbian Studies 29c. Historians, Comediennes, Storytellers: Women
    Filmmakers in the German-Speaking Countries. (Same as Film Studies 29, Gender and Women's Studies 29, and German 29.)]

[^2]:    $\dagger$ Date of first appointment to the faculty.
    *Indicates candidate for doctoral degree at time of appointment.

