The cover image came about in my mind that things are not always what they seem to be, and if our students can learn that, then Brown may have helped them to become more thoughtful human beings and productive citizens.

– Walter Feldman

The Course Announcement is intended to provide only general information about Brown University; including courses offered, and it is not in any manner contractually binding.

The information contained herein is subject to revision and change at any time.

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Brown University does not discriminate on the basis of sex, race, color, religion, age, handicap, status as a veteran, national or ethnic origin, or sexual orientation in the administration of its educational policies, admission policies, scholarship and loan programs, or other school-administered programs.
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## Academic Calendar

### Summer 2017

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<td>March 31 - April 13, 2017</td>
<td>Fri. - Thurs. Pre-registration for Summer courses.</td>
</tr>
<tr>
<td>April 14 - 25, 2017</td>
<td>Fri. - Tues. Summer registration closed for Fall registration (online via Banner for continuing students).</td>
</tr>
<tr>
<td>April 26 - June 28, 2017</td>
<td>Wed. - Wed. Late registration period for Summer courses.</td>
</tr>
<tr>
<td>June 26, 2017</td>
<td>Mon. Summer Session begins.</td>
</tr>
<tr>
<td>June 28, 2017</td>
<td>Wed. Last day to change courses. (All students MUST be in their registered courses by Thursday, June 29.)</td>
</tr>
<tr>
<td>July 11, 2017</td>
<td>Tues. Last day to change grade options.</td>
</tr>
<tr>
<td>Aug 5 - 8, 2017</td>
<td>Sat. - Tues. Reading period.</td>
</tr>
<tr>
<td>August 8, 2017</td>
<td>Tues. Last day to drop a course. Last day to initiate a Course Performance Report via ASK.</td>
</tr>
<tr>
<td>August 11, 2017</td>
<td>Fri. Summer Session ends.</td>
</tr>
<tr>
<td>August 12, 2017</td>
<td>Sat. Residence halls close.</td>
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### Fall 2017

<table>
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<tr>
<td>Aug. 1, 2017</td>
<td>Tues. Last day for payment of charges.</td>
</tr>
<tr>
<td>Sept. 5, 2017</td>
<td>Tues. Opening Convocation at 4:00 p.m. Registration of new students for the first semester (7:00 pm to midnight).</td>
</tr>
<tr>
<td>Sept. 6, 2017</td>
<td>Wed. Classes of the first semester begin. Web registration begins at 8:00 a.m.</td>
</tr>
<tr>
<td>Sept. 7, 2017</td>
<td>Thurs. First day of RISD Fall Session.</td>
</tr>
<tr>
<td>Sept. 14, 2017</td>
<td>Thurs. Last day to register for a Fall RISD course without a fee or change a grade option for a Fall RISD course - (5:00 p.m. deadline).</td>
</tr>
<tr>
<td>Sept. 19, 2017</td>
<td>Tues. Last day to add a course without a fee. (5:00 p.m. deadline.) The web will be taken down for approximately one hour. Once relaunched, all course adds require Instructor override and will be charged a late fee of $15 per course.</td>
</tr>
<tr>
<td>Oct. 3, 2017</td>
<td>Tues. Last day to add a course (includes late fee), change from audit to credit, or change a grade option declaration (5:00 p.m. deadline).</td>
</tr>
<tr>
<td>Oct. 10, 2017</td>
<td>Tues. Date by which sophomores entering their 5th semester must file their concentration declaration forms via ASK to avoid having a 'No Concentration' hold placed against their Banner registration (5:00 pm deadline).</td>
</tr>
<tr>
<td>Oct. 15, 2017</td>
<td>Sun. Deadline for students currently on leave to apply for readmission for Semester II.</td>
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### Winter 2018

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<tr>
<td>Nov. 15 - Dec. 1, 2017</td>
<td>Wed. - Fri. Registration for Wintersession courses (begins at 9:00 A.M.).</td>
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<td>Dec. 1, 2017</td>
<td>Fri. Last day to register for a Wintersession course (5:00 p.m. deadline).</td>
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<tr>
<td>Dec. 22, 2017</td>
<td>Fri. Wintersession online courses may begin</td>
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<tr>
<td>Jan. 1, 2018</td>
<td>Mon. Residence halls open (for students registered for Wintersession classes only).</td>
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### Spring 2018

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<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Apr. 26 - June 28, 2018</td>
<td>Wed. - Wed. Late registration period for Summer courses.</td>
</tr>
<tr>
<td>June 26, 2018</td>
<td>Mon. Summer Session begins.</td>
</tr>
<tr>
<td>June 28, 2018</td>
<td>Wed. Last day to change courses. (All students MUST be in their registered courses by Thursday, June 29.)</td>
</tr>
<tr>
<td>July 11, 2018</td>
<td>Tues. Last day to change grade options.</td>
</tr>
<tr>
<td>Aug 5 - 8, 2018</td>
<td>Sat. - Tues. Reading period.</td>
</tr>
<tr>
<td>August 8, 2018</td>
<td>Tues. Last day to drop a course. Last day to initiate a Course Performance Report via ASK.</td>
</tr>
<tr>
<td>August 11, 2018</td>
<td>Fri. Summer Session ends.</td>
</tr>
<tr>
<td>August 12, 2018</td>
<td>Sat. Residence halls close.</td>
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</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Jan. 2, 2018</td>
<td>Tue.</td>
<td>Wintersession begins (On-Campus and Destination courses).</td>
</tr>
<tr>
<td>Jan. 8, 2018</td>
<td>Mon.</td>
<td>Last day to change a grade option declaration.</td>
</tr>
<tr>
<td>Jan. 15, 2018</td>
<td>Mon.</td>
<td>Martin Luther King, Jr. holiday. No University exercises.</td>
</tr>
<tr>
<td>Jan. 16, 2018</td>
<td>Tues.</td>
<td>Last day to drop a course or request an incomplete from an instructor. Last day to initiate a Course Performance Report via ASK.</td>
</tr>
<tr>
<td><strong>Spring 2018</strong></td>
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</tr>
<tr>
<td>Jan. 1, 2018</td>
<td>Mon.</td>
<td>Last day for payment of charges.</td>
</tr>
<tr>
<td>Jan. 10, 2018</td>
<td>Wed.</td>
<td>Last day to register for a Winter RISD course without a fee or change a grade option for a Winter RISD course (5:00 p.m. deadline).</td>
</tr>
<tr>
<td>Jan. 15, 2018</td>
<td>Mon.</td>
<td>Martin Luther King, Jr. holiday. No University exercises.</td>
</tr>
<tr>
<td>Jan. 23, 2018</td>
<td>Tues.</td>
<td>Registration of new students for the second semester (4:00 pm to midnight).</td>
</tr>
<tr>
<td>Jan. 24, 2018</td>
<td>Wed.</td>
<td>Classes of the second semester begin. Web registration begins at 8:00 am. Theses of candidates for Masters and Ph.D. degrees in May (on Semester I registration fee) are due.</td>
</tr>
<tr>
<td>Feb. 6, 2018</td>
<td>Tues.</td>
<td>Last day to add a course without a fee. (5:00 p.m. deadline) The web will be taken down for approximately one hour. Once relaunched, all course adds require Instructor override and will be charged late fee of $15 per course.</td>
</tr>
<tr>
<td>Feb. 6, 2018</td>
<td>Tues.</td>
<td>Last day of Winter RISD classes.</td>
</tr>
<tr>
<td>Feb. 15, 2018</td>
<td>Thurs.</td>
<td>First day of RISD Spring Session.</td>
</tr>
<tr>
<td>Feb. 21, 2018</td>
<td>Wed.</td>
<td>Classes resume. Last day to add a course (includes late fee), change from audit to credit, or change a grade option declaration (5:00 p.m. deadline).</td>
</tr>
<tr>
<td>Feb. 22, 2018</td>
<td>Thurs.</td>
<td>Last day to register for a Spring RISD course without a fee or change a grade option for a Spring RISD course (5:00 p.m. deadline).</td>
</tr>
<tr>
<td>March 9, 2018</td>
<td>Fri.</td>
<td>Mid-semester deadline. Last day to change from credit to audit in a course (5:00 p.m. deadline).</td>
</tr>
<tr>
<td>Apr. 1, 2018</td>
<td>Sun.</td>
<td>Deadline for students currently on leave to apply for readmission for Semester I. Date by which sophomores entering their 5th semester must file their concentration declaration forms via ASK to avoid having a 'No Concentration' hold placed against their Banner registration. (5:00 pm deadline).</td>
</tr>
<tr>
<td>Apr. 2, 2018</td>
<td>Mon.</td>
<td>Classes resume.</td>
</tr>
<tr>
<td>Apr. 2 - Apr. 13, 2018</td>
<td>Mon. - Fri.</td>
<td>Advising period for fall pre-registration. Students in their first through third semesters will need to procure their advising PIN from their advisor in order to register.</td>
</tr>
<tr>
<td>Apr. 6, 2018</td>
<td>Fri.</td>
<td>Deadline for submission of proposals for undergraduate group study projects (GISPs) for Semester I.</td>
</tr>
<tr>
<td>Apr. 12, 2018</td>
<td>Thurs.</td>
<td>Date by which advisors must approve sophomore submitted concentrations in ASK to avoid having a 'No Concentration' hold placed against the student's Banner registration. (5:00 pm deadline).</td>
</tr>
<tr>
<td>Apr. 17 - 24, 2018</td>
<td>Tues. - Tues.</td>
<td>Registration for Semester I, 2018-19. (Note: No student will be permitted to register for his or her fifth semester unless an approved declaration of concentration has been filed.)</td>
</tr>
<tr>
<td>Apr. 24, 2018</td>
<td>Tues.</td>
<td>End of the pre-registration period.</td>
</tr>
<tr>
<td>Apr. 27 - May 8, 2018</td>
<td>Fri. - Tues.</td>
<td>Reading Period (optional and at the discretion of the instructor).</td>
</tr>
<tr>
<td>May 1, 2018</td>
<td>Tues.</td>
<td>Deadline for undergraduates to declare a leave for Semester I. Theses of candidates for Masters and Ph.D. degrees in May due.</td>
</tr>
<tr>
<td>May 9 - 18, 2018</td>
<td>Wed. - Fri.</td>
<td>Final Examination Period. (No exams on Sunday May 13).</td>
</tr>
<tr>
<td>May 16, 2018</td>
<td>Wed.</td>
<td>Last day of Spring RISD classes.</td>
</tr>
<tr>
<td>May 27, 2018</td>
<td>Sun.</td>
<td>Commencement.</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
General Regulations

General academic requirements

Undergraduate degrees:
Information regarding general academic degree requirements are listed under 'The College' section of the University Bulletin as well as on the respective websites of the Office of the Registrar (http://www.brown.edu/about/administration/registrar/degree-guidelines-0/college) and the Dean of the College (http://brown.edu/Administration/Dean_of_the_College/degree).

Advanced degrees:
Information regarding Advanced degree requirements for specific academic programs are listed on the Graduate School (http://www.brown.edu/academics/degree-granting) website. Information regarding general and overall guidelines for advanced degrees are also listed on the Office of the Registrar (http://www.brown.edu/about/administration/registrar/degree-guidelines-0/graduate-school) website.

Enrollment and course registration

Instructions about enrollment will be sent via e-mail prior to the opening of each semester to all students. To complete enrollment, all requirements of the pertinent administrative offices of the University must be met, including registration for courses, payment of accounts, and arrangements for housing as appropriate. Fees will be charged for failure to meet established deadlines. All students must complete enrollment in order to be eligible to remain at the University.

Students are urged to note carefully the instructions provided at registration in order to assure eligibility for enrollment, proper registration in courses, and to avoid unnecessary payment of Late Registration and Change of Course fees. All registration materials and/or processes are considered official university documents. Any falsification of signatures or other tampering with such forms/processes constitutes a violation of the Academic Code.

All registration-related deadlines for each semester are listed in the ‘Academic Calendar’ section of the Bulletin and also on the Office of the Registrar website as well as answers to common registration-related questions.

For the full text on the Academic Regulations and Instructions for Registration, see the Registrar’s Office web site at:
http://www.brown.edu/about/administration/registrar/course-enrollment/registration

For a tutorial on registration, see:
https://ithelp.brown.edu/kb/articles/746-students-search-and-register-for-courses-on-courses-brown

To access the most up-to-date course information including credit bearing summer session offerings (*The course information in the PDF versions of the University Bulletin and Course Announcement Bulletin is current as of February 2017), see:
http://selfservice.brown.edu/menu and select ‘Courses@Brown (https://cab.brown.edu)’

Course Credit

The semester course is the unit of credit. This is defined as a course taken for the duration of one semester and, for purposes of evaluation, may be considered the approximate equivalent of four semester hours.

Course Numbering

Courses numbered 0001-0999 are strictly for Undergraduate credit (Graduate students may enroll in such courses with the permission of the instructor and the Graduate School.)

Courses numbered between 1000-1999 are for both Undergraduate and Graduate credit depending on the level of the student’s degree program.

Courses numbered between 2000-2999 are for Graduate credit (Undergraduate students may enroll in such courses and may be applied towards their Undergraduate degree requirements by permission of the instructor.)

Courses numbered above 3000 are strictly for credit in the Alpert Medical School. Certain MD level courses may be taken for credit for Undergraduate students enrolled in the PLME program, but such courses do not count towards quantity, concentration, or Latin honors requirements for the Baccalaureate degree.

Maximum Course Load and Auditing

No student enrolled in The College or the Graduate School may enroll for more than five Brown credits in a semester. A degree candidate paying full tuition (4 or more enrollment units per semester) and is enrolled in less than five academic credits may be permitted to audit (see below section on auditing) additional course(s). At no time may a student be registered for more than 5 credits/courses including audits.

Enrollment Without Academic Credit

Auditing. An auditor is a student who is registered in a course without earning academic credit upon successful completion under the following conditions: (1) the student must be properly registered for it; (2) the student must pay the usual course fee except as indicated in the next paragraph; (3) the student is entitled to all instruction in the course, including conferences, the criticism of papers, tests, and examinations. Any student registered on a full-time basis may be permitted to audit additional courses in any semester without charge. The total number of course registrations, including audits, may not exceed five credits.

Non-degree or student paying less than four enrollment units of tuition may choose to audit if they so choose, but the student does so with the understanding that they will pay the equivalent rate as if registered for academic credit.

With the concurrence of the instructor, the fact that a course has been audited shall be entered on the permanent record of any student electing this privilege. The status of a course in which a student has registered may not be changed from audit to credit after the fourth week of classes or from credit to audit after midterm.

Vagabonding. A “vagabond” is a student who, with the permission of the instructor involved, visits a given course occasionally or regularly without payment of fee. It is understood that such a student shall be entitled to participate in classes and activities, including discussions, conferences, and papers, only at the pleasure of the instructor.

Attendance, Grading, Examinations

Attendance
It is in the interest of every student to attend all sessions of the classes in which registered, and each student has an obligation to contribute to the academic performance of all by full participation in the work of each class; however, within such limits as are necessary for the general welfare, a student benefits also from exercising discretion and assuming responsibility for his or her educational progress.

Accordingly, unless the instructor imposes attendance requirements, students are not limited with respect to the number of absences from a course. When, in the instructor’s opinion, a student is abusing the privilege of voluntary attendance, the appropriate dean’s office should be notified so that appropriate action may be taken.

A student is always fully responsible for any course work missed because of absences and will be assigned failing grades in final examinations missed without excuse from the dean’s office.

No student organization shall make any appointment for undergraduates which conflicts with college exercises unless permission has been obtained from the dean.

Grading System

At the end of each semester final grades are given in semester courses. In all courses, except those designated by the instructor as Mandatory Satisfactory/No Credit, a student may, in consultation with the advisor,
General Regulations

elect to be graded on a basis of either Satisfactory/No Credit or A, B, C/No Credit. A student must for every course taken indicate by the end of the fourth week of the semester which basis for grading is elected.

Any student regularly enrolled in a course, no matter whether for A, B, C/No Credit or for Satisfactory/No Credit, may request from the instructor a more detailed written evaluation of his or her work. (See Course Performance Report below.) Such supplemental evaluations are intended primarily for the information of the student and do not replace departmental evaluations.

No Credit. This grade is given when courses are not satisfactorily completed. The notation No Credit, and the description of the course in which it is given, are not entered on the official academic transcript.

1. Courses may be designated to be graded on a Mandatory Satisfactory/No Credit basis for all students enrolled on the initiative of the instructor. The designation of a course by an instructor to be graded S/NC only must be announced no later than the first day of classes and entails the responsibility for providing Course Performance Report forms to all students who request them. An asterisk shall accompany the listing on the transcript of any course that has been designated by the instructor to be graded on the basis of S/NC only, with an appropriate explanation of the symbol provided.

2. In exceptional circumstances, a course may be left incomplete (except for a regularly scheduled final examination—see paragraph 3 below), with the instructor’s consent. In such cases, a grade of INC will be assigned provided that the student has filed a request for extension of time to complete the work of the course and the instructor has consented to such a request. Unless an earlier date is specified by the instructor, grades of INC must be made up as follows: for Semester I, by midsemester of Semester II; for Semester II or the for-credit 7 week Summer Session, by the first day of Fall semester. Extensions beyond semester in which the course left incomplete was taken may be granted by the instructor who will indicate this in writing to the registrar. A course not completed by the designated time will be assigned a grade of NC unless the instructor indicates that sufficient work has been completed to justify course credit by submitting, as appropriate, a grade change from INC to A, B, C, or S. A grade of NC assigned in accordance with these procedures may be changed subsequently, but no later than one calendar year after the end of the semester in which the course was taken.

3. If a student is absent from a regularly scheduled final examination for a course, the instructor should submit either an INC or an NC. If the absence from the examination is excused by the dean, the student will be permitted to take a Special Examination and the original grade will be made into an ABS temporarily. The Special Examination will be administered by the Office of the Registrar in accordance with the provisions in the Faculty Rules for such examinations, unless other arrangements are agreed to by the instructor and the student, and communicated to the registrar. If the absence from the final examination is not excused by the dean, the student will receive no credit for the course.

Year Courses: A year course is one in which both halves must be passed in order to get credit for the entire year. The grade at the end of the first semester is normally a temporary one. Neither semester may be elected independently without special permission. The final grade submitted at the end of the course covers the work of the entire year and is recorded as the final grade for both semesters. It is normally expected that the second half of a year course will be completed in the second semester of the same academic year in which the first half was taken. If the second half of the year course is not completed at the end of that academic year, the grade for the first semester will become a No Credit. If the student completes the second part of the year course during a later academic year, he or she may need to notify the Registrar’s Office, in order to reactivate the first part of the course. In registering for the second half of a year course, students must register for credit if the first half was taken for credit. Similarly, if registered for audit in the first half, the second half of the course registration must also be as an audit. Exceptions must be approved by both the academic department and the Committee on Academic Standing.

Repeating Courses: Unless a course is explicitly approved by either the College Curriculum Council or Graduate Council as being able to be repeated for credit. Once course credit has been earned with an initial passing grade A, B, C, or Satisfactory (S) or through Transfer Credit it cannot be officially registered for again for in an effort to improve one’s initial grade.

Grade Requirements for Advanced Degrees: A minimum grade of either Satisfactory or C in a 1000 or 2000 level course carries credit toward all advanced degrees. Individual departments may, subject to the approval of the Graduate Council, set higher grade requirements.

Advanced degree candidates may be required to register in courses primarily for undergraduates (numbered 1–999); these courses do not carry advanced degree credit. On occasion, however, and with approval of the student’s department and the dean, a student may register for such a course with extra work for advanced degree credit. This course then has the same standing as a 1000-level course and an EX is noted on the transcript. This provision for extra work does not apply to courses of the level of 1–999 taken for graduate credit by students in MD program.

Course Performance Reports: Students, regardless of grade option selected, may request the instructor to complete a Course Performance Report. This request should be by the deadline specified in the Academic Calendar for the semester in which the course is being completed. The instructor may decline to complete such a form if it is believed he or she has inadequate information to do so. Particular consideration should be given to requests from students for whom the course is part of their concentration program or the course is taken on the S/NC basis. Copies of Course Performance Reports will be made available to: (1) the student, (2) the dean’s office, and (3) the student’s concentration advisor. While not part of the official record, Course Performance Reports may be sent out of the University at the student’s request along with an official Brown University academic transcript. In such cases, the student must provide copies of such CPRs to be enclosed at the time the transcript is initially requested.

Transcripts: Requests for transcripts must be made either in writing by completing a Transcript Order Form, or electronically. For further information please visit the Office of the Registrar’s website (http://www.brown.edu/about/administration/registrar/academic-transcript-requests). Transcripts will be issued only if all financial obligations to the University have been met.

An official transcript consists of a copy of the permanent record listing courses passed and grades received. A statement is added to all transcripts explaining the grading system and indicating that the student may elect to include other material with the official transcript. The student should choose this material in consultation with his or her advisor. The University will mail this material in one envelope along with the official transcript.

Examinations

A final, written examination (at the end of each semester) shall be given in each course numbered under 2000 unless the instructor of a particular course decides to use some other mode of final evaluation. If the written examination is not to be used, the mode of final examination which is to be used shall be made known to the students in the course no later than midterm and, in addition, the department and the registrar shall be informed.

Final Examination Schedule: A pre-defined period at the close of each semester is provided for final examinations for those courses for which such an examination is scheduled. Two examination periods are scheduled for each day. The examination group is determined by, in most cases, the offering time associated with the course (indicated by the figure in parentheses) and also as displayed on Banner Web. The schedule for 2017-2018 is as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>9 am Group</th>
<th>2 pm Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 13 W</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Dec. 14 Th</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Dec. 15 F</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Dec. 16 Sat</td>
<td>17</td>
<td>4</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Exam Excuses: The Office of the Dean of the College is solely responsible for determining whether a student's absence from a final examination is excused. To ensure equitable treatment of all students, students are excused from exams only for family or medical emergencies or for religious reasons. Please note that students' travel plans are never an excuse for missing a final exam. Faculty wishing to grant a student an exam excuse may contact the appropriate academic deans authorized to grant exam excuses. In emergency situations, students who are unable to contact their professors must contact the Office of the Dean of the College, which will determine whether or not an exam excuse is warranted. Course instructors are notified of exam excuses granted by the Dean of the College Office.

Consistent with Brown’s policy on nondiscrimination, students who are unable to take a final examination due to religious observance may arrange to take their final at an alternate time. Consultation is required with the course instructor, the Chaplain's Office, and the Office of the Registrar, and the arrangements must be made by mid-semester. Students may obtain more information and an application for rescheduling a final due to religious observance from the Registrar's Office.

Make-up exams for approved exam excuses are administered by the Registrar in the second week of the subsequent fall or spring term. The Registrar's Office informs students by email of the date, time, and location of make-up exams.

Placement and Achievement Tests in Foreign Languages. Placement tests in the foreign languages are given during Orientation Program in the fall and during the first week of classes in each semester. All students, before taking college courses in a foreign language in which they have presented entrance credit, must take either a placement test at Brown University or, preferably, a College Board Language Achievement Test in secondary school. Students with outstanding performance on these tests, or on the Advanced Placement Tests of the College Entrance Examination Board, may be admitted to advanced courses without the usual course prerequisites.

Student Code of Conduct

Academic Code Violations

All cases of academic dishonesty among undergraduates, graduate, or medical students, as defined in the Academic Code at Brown University, shall be referred to the dean of the College, Graduate School, or Medical School, or his or her designated representative. A student accused of such an offense shall be notified in writing as soon as possible of the specific charge or charges against him or her before his or her case is considered. The student shall be given the opportunity of a hearing before the designated representative of the dean of the College, Graduate School, or Medical School, and two members of the faculty, at which all relevant facts may be presented. A student shall have the right to appeal any decision to the dean of the College, Graduate School, or Medical School within five business days after receipt of the official letter outlining the case and the decision reached. For definitions of offenses against the Academic Code, procedures, policies, and a list of penalties, see the pamphlet issued by the Office of the Dean of the College, Principles of the Brown University Community: The Academic Code and Non-Academic Disciplinary System.

Nonacademic Discipline

Brown strives to sustain a learning environment that supports individual exploration. Central to this effort are the four primary Principles of the Brown University Community: individual integrity, respect for others, respect for University resources, and respect for the values of teaching, learning and scholarship. Our community believes that adherence to these principles supports the overall academic mission of the University. Violations of these principles will be handled through the procedures governing the Academic Code and the Non-Academic Disciplinary Procedures. These procedures are designed to address behaviors that impede the educational activity of the University or that infringe upon the rights of others.

Non-academic disciplinary cases are administered by the Office of Student Life, the Peer Community Standards Board, and the University Disciplinary Council. Specific hearing procedures can be found online at www.brown.edu/randr. Printed copies of the Non-Academic Disciplinary Procedures are available from the Office of Student Life.

Curricular Programs

Diverse Perspectives in Liberal Learning

Brown’s open curriculum challenges students to open their perspective on the world by embracing new experiences, new ways of thinking, and new people. One way students can address this expectation is through challenging coursework. Diverse Perspectives in Liberal Learning courses offer students the means not only to understand the complex dynamics of social inequity, exclusion, and difference but also to do something with what they learn.

Through content, methodology, or pedagogy, DPLL courses seek to:

• Expose and critique the diverse historical and cultural forces that shape the construction of knowledge in all disciplines;

• Teach the arts of critical reflection: questioning thoughtfully, listening openly, and speaking cogently about differing points of view;

• Develop responsible citizens by examining the ways that power and privilege affect human lives and providing pathways to meaningful change.

Some DPLL courses may, through their content, focus on questions of race, nationality, ethnicity, sexual orientation, religion, gender, age, disability, or socio-economic status. Others may employ creative methods to investigate how knowledge is constructed and received in different contexts. Still others may feature community-based activities, encouraging students to become agents of change both locally and globally.

A complete list of each semester’s D PLL courses may be viewed in Courses@Brown by choosing “Diverse Perspectives in LL” in the Curricular Programs field.

First Year Seminars

First-year seminars ensure close contact between first-year students and faculty members while simultaneously offering a rigorous introduction to the concepts and methods of a particular subject area or department. Seminars have few if any prerequisites and are offered in all areas of the curriculum, from anthropology to physics to literary arts. Students receive regular feedback on the work they produce for the seminars, and seminar faculty often serve as informal mentors for their students long after the class has ended.

A complete list of each semester’s seminars may be viewed in Courses@Brown by choosing “First-Year Seminar” in the Curricular Programs field. Registration for first-year seminars takes place during the summer prior to students’ matriculation to Brown. Depending on availability, first-year students may also add seminars to their course schedules during pre-registration and shopping periods.
Diverse Perspectives in Liberal Learning

Fall 2017

**African Studies**
- AFRI 0210 S01 16406 Afro Latin Americans Anani Dzidzienyo
- AFRI 0670 S01 15298 Global Black Radicalism Brian W E Meeks
- AFRI 1050V S01 15048 Rhythm and Resistance Ryan A Mann-Hamilton
- AFRI 1110 S01 15299 Voices Beneath the Veil Elmo Terry-Morgan
- AFRI 1210 S01 16407 Afro-Brazilians + Brazilin Polity Anani Dzidzienyo

**American Studies**
- AMST 0191C S01 16491 Race + Space: Segregation etc. Jonathan Cortez
- AMST 0191D S01 16718 AsianAm Lit of Social Activism Yuanyuan Feng
- AMST 1600C S01 16145 Anti-Trafficking Sapor Complex Elena Shih
- AMST 1611A S01 15808 20thC US Immigration and Culture Richard Alan Meckel
- AMST 1700K S01 16720 Race in the Americas Kevin A. Escudero
- AMST 1905X S01 16107 Public Memory Beverly Haviland

**Anthropology**
- ANTH 0800 S01 16643 Intro to Linguistic Anthro TBD
- ANTH 1240 S01 15873 Religion and Culture Bhrigupati Singh
- ANTH 1253 S01 16644 The Visual in Anthropology Lina M. Fruzziotti

**Biology**
- BIOL 0190P S01 16190 Pride/Prej Dev of Sci Theories Stephen L. Helfand

**Classics**
- CLAS 1140 S01 15685 Classical Philosophy of India David Buchta

**Comparative Literature**
- COLT 0610Y S01 16691 Women’s Writing in Arab World Emily L. Drumsta
- COLT 0610Z S01 16082 Intersections of Race and Cult Esther K. Whitfield

**East Asian Studies**
- EAST 0600 S01 15655 Lit and Soc Ineq in Late China Kaijun Chen
- EAST 1230 S01 15247 Edo Woodblock Printing TBD
- EAST 1940A S01 15617 Crafting Early Modern China Kaijun Chen
- EAST 1950W S01 15240 Translating Korean Samuel E. Perry

**Economics**
- ECON 1370 S01 16358 Race and Inequality in the US Glenn C. Louy
- ECON 1510 S01 16749 Economic Development TBD

**Education**
- EDUC 0610 S01 15114 Brown v. Board of Education Tracy L. Steffes
- EDUC 1035 S01 15594 Decolonizing African Education TBD

**English**
- ENGL 0710B S01 15579 African Amer Lit and Slavery Rolland D. Murray
- ENGL 1140D S01 15606 Writing Diversity Carol L DeBoer-Langworthy

**Ethnic Studies**
- ETHN 1000 S01 16108 Intro to Amercn/Ethnic Studies Elizabeth M. Hoover
- ETHN 1200D S01 16109 Latin/o/Literature Ralph E. Rodriguez
- ETHN 1750B S01 16110 Eating Local in Indian Country Elizabeth M. Hoover
- ETHN 1750D S01 16714 Transpacific Asian American St Evelyn Hu-Dehart
- ETHN 1750E S01 16111 Transpacific Popular Culture TBD

**Gender and Sexuality Studies**
- HISP 1721 S01 15253 Cinemas Body Gertrud M. Koch

**Hispanic Studies**
- HISP 0730 S01 15803 Latin Am in Its Lit + Culture Felipe I. Martinez-Pinzon
- HISP 0750P S01 16087 Contemp Social Justice Cinema Sarah L. Thomas

**History**
- HIST 0555B S01 15292 Robber Barons Lukas B. Riepep
- HIST 0559B S01 15289 Asian Americans Third World Naoko Shibusawa
- HIST 0637A S01 15285 History of Jews in Brazil James N. Green
- HIST 1505 S01 15268 Making America Modern Lukas B. Rieppel
- HIST 1553 S01 15271 Empires in America to 1890 Naoko Shibusawa
- HIST 1962D S01 16540 Social Lives of Dead Bodies Rebecca A. Nedostup

**Judaic Studies**
- JUDS 0603 S01 16654 Race, Religion, + the Secular Paul E. Nahme
- JUDS 1713 S01 15143 Intro to Yiddish Cultr + Lang Rachel Rojanski

**Middle East Studies**
- MES 0155 S01 16425 Visual Politics in Contemp ME Hanan Toukan
- MES 1300 S01 16478 Intellectual Change:OttomTurk Meltem C Toksoz

**Modern Culture and Media**
- MCM 0902C S01 16834 Dig Media/Ecological Crisis Thomas Patrick Pringle
- MCM 0902D S01 16831 Visual Culture of Suffering Jane'a Dominique Johnson
- MCM 1504R S01 16205 Iranian Cinema Joan K. Cojpec

**Music**
- MUSC 0021B S01 16559 Reading Jazz Matthew Richards Mcgarrell
- MUSC 0642 S01 16787 World Music Ensemble Martin K. Oberg

**Public Health**
- PHP 1070 S01 16436 Brdn of Disease in Devel Cntry Stephen T. Marney
- PHP 1100 S01 16449 Comparative Health Care Systms Cara J Sammartino
- PHP 1680I S01 16464 Disability/Health and Community Sarah E. Skeels

**Religious Studies**
- RELS 0075 S01 16088 Blues People:Topics in African Andre C. Williar
- RELS 0080 S01 16432 Japan: Nature, Ritual and Arts Janine T Anderson Sawada
- RELS 0088 S01 15383 Judaism, Christianity, and Isl Michael L. Satlow
- RELS 0600C S01 15385 Radical Islam Nancy Khalek

**Russian**
- RUSU 1967 S01 15301 Russian Postmodernism Fabrizio Fengehi

**Slavic**
- SLAV 1300 S01 15148 Sociolinguistics Masako Ueda Fidler

**Turkish**
- TKSH 0100 S01 15068 Introduction to Turkish Ercan Balci

**Urban Studies**
- URBN 0210 S01 15162 The City/Intro to Urban Study Dietrich Neumann
- URBN 1870M S01 15318 Urban Regimes in Amer Republic Marion E. Orr
Spring 2018

African Studies
AFRI 0990 S01 24259 Black Lavendar-Gay+Lesbn Plays Elmo Terry-Morgan
AFRI 1020C S01 25095 Afro-Luso-Brazilian Triangle Anani Dzidzienyo
AFRI 1050A S01 24260 Advanced RPM Playwriting Elmo Terry-Morgan
AFRI 1050D S01 24261 Intermediate RPM Playwriting Elmo Terry-Morgan
AFRI 1050E S01 24262 RPM Playwriting Elmo Terry-Morgan
AFRI 1060E S01 25096 W African Wrtrs/Poetsl Kingdm Anani Dzidzienyo
AFRI 1150 S01 24471 Afro-Caribbean Philosophy Paget Henry
AFRI 1360 S01 24258 Knowledge, Texts + Methodology Brian W E Meeks

American Studies
AMST 16110 S01 25388 Early American Film Beverly Haviland
AMST 1700L S01 25122 Bad Rehab: The American Ethnic Elena Shih
AMST 1900T S01 24652 Disability Studies Debbie Weinstein

Anthropology
ANTH 0066D S01 25378 Who Owns the Past? Patricia E. Rubertone
ANTH 0066N S01 24683 Peoples, Cultures Greater Mex Matthew C. Gutmann
ANTH 0100 S01 24686 Intro to Cultural Anthropology Bhrigupati Singh
ANTH 0130 S01 24687 Myths Alive William S. Simmons
ANTH 1030 S01 25326 Pre-Columbian Art and Architec Stephen D. Houston
ANTH 1310 S01 24685 Anthro Perspcvt Internl Hth Daniel Smith
ANTH 1623 S01 25379 Archaeology of Death Patricia E. Rubertone

Arabic
ARAB 0800 S01 24969 Adv Arabic Language + Culture Miled Faiza

Assyriology
ASYR 1100 S01 24152 Gods/Mysts in Mesopotamia Matthew T. Rutz
ASYR 1623 S01 24153 Astronomy Before Telescope John M. Steele

Comparative Literature
CLLT 0810I S01 24740 Talespoken as Non-Western Wld Dore J. Levy
CLLT 0812B S01 25385 What is Colonialism? Ariella Azoulay

Czech
CZCH 0320A S01 24133 Czech Animation Masako Ueda Fidler
CZCH 0320A S02 24134 Czech Animation Masako Ueda Fidler

East Asian Studies
EAST 0500 S01 24289 Childhood and Culture in Japan Samuel E. Perry
EAST 0810 S01 24531 Pop Culture Early in Mod China Kajun Chen
EAST 1060 S01 24295 Manly Men, Womanly Wmn + Ottr TBD
EAST 1230 S01 24294 Edo Woodblock Printing TBD
EAST 1951 S01 24533 Lit and Tech Early Mod China Kajun Chen

Economics
ECON 1310 S01 25068 Labor Economics Kenneth Chay
ECON 1360 S01 25084 Health Economics TBD
ECON 1480 S01 25472 Public Economics Nathaniel G. Hilger

English
ENGL 0100R S01 24846 American Histories and Novels Daniel Kim
ENGL 0150X S01 24849 The Claims of Fiction Olakunle George
ENGL 0710Q S01 24847 Literature Segregation Rolland D. Murray
ENGL 1710I S01 24495 Harlem Renaissance Rolland D. Murray
ENGL 1710J S01 24496 Modern African Literature Olakunle George

Environmental Studies
ENVS 0705 S01 25056 Ecology and the Environment J Timmons Roberts

Ethnic Studies
ETHN 1200B S01 25389 Cont Indigenous Education Adrienne J. Keene
ETHN 1200E S01 24914 Latinx Novel Lab Ralph E. Rodriguez

Hebrew
HEBR 0600 S01 24140 Issues in Israel in Hebrew David C. Jacobson

History
HIST 1122 S01 25158 China Pop/Soc Hist of Pop Cult Rebecca A. Nedostup

Judaic Studies
JUDS 0061 S01 24141 Foreigner, Refugee, + Minority Paul E. Nahme
JUDS 0862 S01 24869 Bible Became Holy Michael L. Satlow
JUDS 1614 S01 24143 Heidegger, the Jews, + Crisis Paul E. Nahme
JUDS 1726 S01 24145 Jewish Humor + Comm Ent Mary Gluck
JUDS 1773 S01 24146 Blacks + Jews Rachel Rojanski

Music
MUSC 1932 S01 25465 American Roots Music Kiri M. Miller

Political Science
POL 1824M S01 24460 Pol of Race + Criminal Justice Paul F Testa

Portuguese and Brazilian Studies
POBS 0620 S01 24659 Map Portuges-Speak Cltr:Ptugl Simas-Almeida
POBS 0990 S01 24660 Mapping Cross-Cult. Identities Patricia I. Sobral

Public Health
PHC 1600 S01 25498 Obesity in the 21st Century Akilah Keita

Religious Studies
RELS 0015 S01 24334 Sacred Stories Susan Ashbrook Harvey
RELS 0056 S01 24335 Spiritual But Not Religious Michael L. Satlow
RELS 1300A S01 24341 Money, Media, and Religion Daniel Vaca
RELS 1530D S01 24342 Islamic Sectarianism Nancy Khalek

Urban Studies
URBN 1200 S01 24123 The U.S. Metropolis, 1945-2000 Samuel Zipp
URBN 1870J S01 24274 Poltics of Community Organizing Marion E. Orr

First Year Seminars
Fall 2017

American Studies
AMST 0150C S01 16075 Gender, Race, and Science TBD
AMST 0150E S01 16143 Skill Steven D. Lubar

Applied Mathematics
APMA 0110 S01 16032 FYS in Data Science Katherine M Kinnaid

Archaeology and Ancient World
ARCH 0270 S01 16462 Troy: Archaeology of an Epic TBD

Assyriology
ASYR 0300 S01 15156 Babylon: Myth and Reality John M. Steele

Biology
BIOL 0150A S01 16188 Tech/Anlys DNA-based Biotech Jody Hall
BIOL 0150D S01 16044 Teching in Regenerative Mdcne TBD
BIOL 0190E S01 16286 Botanical Roots/Mod Medicines Fred V Jackson
BIOL 0190F S01 16288 Darwinian Medicine Marc Tatar
BIOL 0190P S01 16190 Pride/Preq Dev of Sci Theories Stephen L. Helfand
BIOL 0190R S01 15658 Phage Hunters, Part I Sarah E. Taylor
BIOL 0190U S01 16191 Plant Devel, Struct, Function Peter Heywood

Chemistry
CHEM 0008E S01 16828 Chemistry of Renewable Energy Kathleen M. Hess

Cognitive, Linguistic and Psychological Sciences
CLPS 0050A S02 16233 Computing as in Brains/Computrs James A. Anderson
CLPS 0050L S01 16156 Anthropog. Activity + Animals Ruth Melanie Colwill

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Comparative Literature
COLT 0510F S01 15722 Fidel Castro and Che Guevara Esther K. Whitfield
COLT 0610D S01 15639 Rites of Passage Arnold Louis Weinstein

English
ENGL 0150C S01 15574 The Medieval King Arthur Elizabeth Johnson Bryan
ENGL 0150Q S01 15575 Realism and Modernism Paul B. Armstrong
ENGL 0150Y S01 15576 Brontës and Brontëism Benjamin W. Parker

Environmental Studies
ENVS 0070C S01 15518 Transcending Transpnt Impacts Kurt Teichert

French Studies
FREN 0720A S01 15730 De l'Amour courtois au désir Virginia A. Krause

Hispanic Studies
HISP 0750P S01 16087 Contemp Social Justice Cinema Sarah L. Thomas

History
HIST 0522O S01 15561 The Enlightenment Joel W. Revill
HIST 0523B S01 16713 State Surveillance in History Holly A Case
HIST 0555B S01 15292 Robber Barons Lukas B. Rauppel
HIST 0556A S01 15273 Sport in American History Howard P. Chudacoff
HIST 0559B S01 15289 Asian Americans Third World Naoko Shibusawa

Judaic Studies
JUDS 0050H S01 15142 Israel's Wars Rachel Rojanski

Literary Arts
LITR 0100A S01 16669 Introduction to Fiction TBD
LITR 0100A S02 16675 Introduction to Fiction TBD
LITR 0100B S01 16677 Introduction to Poetry TBD
LITR 0510B S01 16098 Into the Machine Joanna E. Howard
LITR 0710 S01 16095 Writers on Writing Seminar Carole Maso

Music
MUSC 0021B S01 16559 Reading Jazz Matthew Richards McGarrell

Political Science
POLS 0820T S01 15516 Women's Welfare in Global Pers Linda J. Cook
POLS 0820U S01 15468 Drug War Politics Peter R. Andreas

Portuguese and Brazilian Studies
POBS 0810 S02 15859 Cross-Cultural Identities Patricia I. Sobral
POBS 0850 S01 16523 Comp Appr Lits Brazil + USA Luiz Fernando Valente
POBS 0910 S01 15836 On the Dawn of Modernity Onesimo T. Almeida

Public Health
PHP 0500 S01 16445 Pain and the Human Condition Nisha Gupta Trivedi
PHP 0100 S01 16446 Statistics is everywhere Zhijin J. Wu

Religious Studies
RELS 0090K S01 15384 Christmas in America Daniel Vaca
RELS 0090L S01 16707 Pilgrimage and Quest Janine T Anderson Sawada

Russian
RUSS 0320E S01 15160 Crime and Punishment Vladimir Golstein

Sociology
SOC 0300F S01 16296 Unequal From Birth Margot Jackson

Urban Studies
URBN 0230 S01 15108 Urban Life in Providence Rebecca Carter

Spring 2018

American Studies
AMST 0150P S01 24653 The Teen Age: In Cold War Amer Richard Alan Meckel

Anthropology
ANTH 0066D S01 25378 Who Owns the Past? Patricia E. Rubertone
ANTH 0066N S01 24683 Peoples, Cultures Greater Mex Matthew C. Gutmann

Biology
BIOL 0150C S01 25393 Scndary Metabolites Med Plants Fred V. Jackson
BIOL 0190S S01 24548 Phage Hunters, Part II Sarah E. Taylor

Cognitive, Linguistic and Psychological Sciences
CLPS 0050J S01 24933 Psychology of Creativity Joachim Israel Krueger
CLPS 0050M S01 24931 Linguistics of Wordplay Scott H AnderBois

Czech
CZCH 0320A S01 24133 Czech Animation Masako Ueda Fidler
CZCH 0320A S02 24134 Czech Animation Masako Ueda Fidler

East Asian Studies
EAST 0650 S01 24293 Lang, Cultr, + Society: Korea Hye-Sook Wang

Education
ENGL 0150E S01 24488 Love and Friendship James A. Kuzner
ENGL 0150X S01 24489 The Claims of Fiction Olakunle George

Hispanic Studies
HISP 0750G S01 24840 Wildeyed Stories Mercedes Vaquero

Literary Arts
LITR 0610A S01 24841 Unpublishable Writing Thalia L. Field
LITR 0710 S01 24849 Writers on Writing Seminar TBD

Political Science
POLS 0820L S01 24448 Phil of the American Founding Nina Tannenwald

Sociology
SOC 0300A S01 25074 Contrasting Societies Michael D. Kennedy

Sophomore Seminars
Fall 2017

Africana Studies
AFRI 0670 S01 15298 Global Black Radicalism Brian W E Meeks

Biology
BIOL 0940A S01 16204 Viral Epidemics Walter J. Atwood
BIOL 0940B S01 16051 Life in a Shell Donald C. Jackson
BIOL 0940D S01 16379 Rhode Island Flora:Local Plant Timothy J. Whitfield

Comparative Literature
COLT 0610Z S01 16082 Intersections of Race and Cult Esther K. Whitfield

Education
EDUC 0610 S01 15114 Brown v. Board of Education Tracy L. Steffes

History
HIST 0654A S01 15294 Welfare States Robert O. Self

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Spring 2018

East Asian Studies
EAST 0500 S01 24289 Childhood and Culture in Japan Samuel E. Perry

Political Science
POLS 0920A S01 24451 Bleeding Heart Libertarianism John O. Tomasi

Portuguese and Brazilian Studies
POBS 0990 S01 24666 Mapping Cross-Cult. Identities Patricia I. Sobral

Writing-Designated Courses

Fall 2017

Africana Studies
AFRI 1110 S01 15299 Voices Beneath the Veil Elmo Terry-Morgan

American Studies
AMST 0150E S01 16143 Skill Steven D. Lubar
AMST 0191C S01 16491 Race + Space: Segregation etc. Jonathan Cortez
AMST 0191D S01 16718 AsianAm Lit of Social Activism Yuanyuan Feng
AMST 1900P S01 16106 Essaying Culture Ralph E. Rodriguez
AMST 1905X S01 16107 Public Memory Beverly Haviland

Anthropology
ANTH 1300 S01 15875 Anthropology of Addictions Irene Glasser

Applied Mathematics
APMA 0101 S01 16032 FYS in Data Science Katherine M. Kinnaird

Archaeology and Ancient World
ARCH 1150 S01 16663 Ancient Cities + Urban Space Marshall Andrews

Assyriology
ASYR 0300 S01 15156 Babylon: Myth and Reality John M. Steele

Biology
BIOL 0190U S01 16191 Plant Devel, Struct, Function Peter Heywood
BIOL 0400 S01 16362 Biological Design Sharon M. Swartz
BIOL 0430 S01 16366 Evolution of Plant Diversity Erika J. Edwards
BIOL 0940A S01 16204 Viral Epidemics Walter J. Atwood

Business, Entrepreneurship and Organizations
BEO 1930A S01 15998 BEO Capstone I TBD
BEO 1930B S01 15999 BEO Capstone I TBD
BEO 1930C S01 16000 BEO Capstone I TBD

Chemistry
CHEM 1560N S01 16829 Organometallic Chemistry Jerome R Robinson

Classics
CLAS 0150 S01 15689 Ancient Philosophy Mary Louise G. Gill
CLAS 0600 S01 15678 Literary Worlds Late Antiquity Joseph Michael Pucci
CLAS 0620 S01 15684 Greek Tragedy Johanna M. Hanink
CLAS 1120B S01 15670 Epic Poetry: Homer to Lucan Pura Nieto Hernandez

Cognitive, Linguistic and Psychological Sciences
CLPS 0050L S01 16156 Anthropog. Activity + Animals Ruth Melanie Colwill

Comparative Literature
COLT 0101 S01 15813 Mexico Crisis/Identity 1519–1968 Stephanie Merritt
COLT 1813K S01 16698 The Problem of the Vernacular Elias I. Muhanna

Education
EDUC 0610 S01 15114 Brown v. Board of Education Tracy L. Steffes
EDUC 1430 S01 15110 Soc Psych of Race, Class + Gen David E Rangel
EDUC 1650 S01 15080 Policy Implementatn in Educatn TBD
EDUC 1850 S01 15078 Moral Development + Education Jin Li

Egyptology
EGYT 1430 S01 15168 History of Egypt I Laurel D. Bestock

Engineering
ENGN 1010 S01 15295 Entrepreneurial Process Daniel E. Warshay
ENGN 1010 S03 15429 Entrepreneurial Process Jon E. Cohen
ENGN 1010 S04 15429 Entrepreneurial Process Jason D. Harry
ENGN 1230 S01 15430 Instrumentation Design David A. Borton
ENGN 1520 S01 15441 Cardiovascular Engineering Karen L K Coulombe
ENGN 1931E S01 15486 Writing Science Cornelia Dean

English
ENGL 0100P S01 16552 Love Stories James A. Kuzner
ENGL 0150C S01 15574 The Medieval King Arthur Elizabeth Johnson Bryan
ENGL 0200W S01 16584 Tragic Variations Alii John Madani
ENGL 0310A S01 15569 Shakespeare Stephen Merriam Foley
ENGL 1561D S01 15584 Writing and Ruins of Empire William Keach

Environmental Studies
ENVS 0070C S01 15518 Transcending Transpnr Impacts Kurt Teichert
ENVS 0110 S01 15620 Humans, Nature and the Environ Dawn King
ENVS 0710 S01 16554 Powering the Past Batthaheba R. Demuth
ENVS 1575 S01 16089 Engaged Climate Policy J Timmons Roberts
ENVS 1615 S01 15521 Environmental Policy Process Amanda Lynch
ENVS 1920 S01 15531 Methods Interdisciplinary Rsch Leah K. Vanway

Gender and Sexuality Studies
GNSS 1200D S01 16109 Latina/o Literature Ralph E. Rodriguez

French Studies
FREN 0720A S01 15730 De l'Amour courtois au désir Virginia A. Krause
FREN 1510A S01 16084 Traduction Stephanie A Ravillon

Hispanic Studies
HISP 0654A S01 15308 Arts of Asia Jeffrey Moser
HISP 0740 S01 15513 Intensive Survey of Spanish Lit TBD

History of Art and Architecture
HIAA 0021 S01 15308 Arts of Asia Jeffrey Moser
HIAA 0710 S01 15309 The Other History of Mod. Arch Itohan I. Osayimwese
HIAA 0801 S01 15306 Art After 68 Courtney J. Martin
HIAA 1870B S01 15307 SoCal: Art in Los Angeles Courtney J. Martin

History
HIST 0150H S01 16486 Foods and Drugs in History Harold J. Cook
HIST 0233 S01 15262 Colonial Latin America Robert Douglas Cope
HIST 0250 S01 15267 American Exceptionalism Michael Vorenberg
HIST 0522O S01 15561 The Enlightenment Joel W. Revill
HIST 0523B S01 16713 State Surveillance in History Holly A Case
HIST 0555B S01 15292 Robber Barons Lukas B. Rieppel
HIST 0556A S01 15273 Sport in American History Howard P. Chudacoff
HIST 0580M S01 15283 Age of Revolutions, 1760-1824 Jeremy R. Mumford
HIST 0954A S01 15194 Welfare States Robert O. Self
HIST 1149 S01 15595 Imperial Japan Kerry Smith
HIST 1200C S01 15278 Greece HistAxnrd-Romn Cnsgt Kenneth S. Sacks
HIST 1230B S01 15266 Fin-de-Siecle Europe Mary Gluck
HIST 1262M S01 15339 Truth on Trial Caroline Castiglione
HIST 1268C S01 15270 English History, 1529-1660 Tim Harris
HIST 1310 S01 15276 History of Brazil James N. Green
HIST 1505 S01 15268 Making America Modern Lukas B. Rieppel
HIST 1551 S01 15261 American Urban Hist, 1870-1965 Howard P. Chudacoff
HIST 1553 S01 15271 Empires in America to 1890 Naoko Shibasawa
HIST 1961I S01 16800 N Korea: Past, Present, Future James L. McClain
HIST 1962D S01 16540 Social Lives of Dead Bodies Rebecca A. Nedostup
HIST 1964A S01 15287 Age of Impostors Tara E. Nummedal
HIST 1964F S01 15281 Early Modern Ireland Tim Harris
HIST 1968A S01 16102 Approaches to the Middle East Eshara B. Dournani

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIST 1969A S01 15284 Israel-Palestine: Lands/People Omer Bartov
HIST 1992 S01 15331 History Honors Workshop TBD

**International Relations**
INTL 1803 S01 16086 Comparative Politics of Fin J. Nicholas Ziegler

**Italian Studies**
ITAL 1010 S01 16339 Dante in English Translation Ronald L. Martinez

**Judaic Studies**
JUDS 0603 S01 16545 Race, Religion, + the Secular Paul E. Nahme
JUDS 1650 S01 15134 Religion and Sexuality Michael L. Satlow
JUDS 1820 S01 15141 Holocaust Literature David C. Jacobson

**Literary Arts**
LITR 0110B S01 16699 Introduction to Fiction TBD
LITR 0110B S02 16675 Introduction to Fiction TBD
LITR 0100B S01 16677 Introduction to Poetry TBD
LITR 0110A S02 16680 Fiction I TBD
LITR 0110A S03 16681 Fiction I TBD
LITR 0110B S01 16682 Poetry I TBD
LITR 0110B S03 16684 Poetry I TBD
LITR 0210A S01 16099 Fiction Writing II Joanna E. Howard
LITR 0210A S02 16100 Fiction Writing II TBD
LITR 0710 S01 16095 Writers on Writing Seminar Carole Maso
LITR 1010A S01 16096 Advanced Fiction Meredith Steinbach
LITR 1010B S01 16103 Advanced Poetry Peter Gale Nelson
LITR 1110R S01 16094 Performance Dimensions of Text Thaila L. Field
LITR 1110S S01 16097 Fiction into Film Meredith Steinbach

**Modern Culture and Media**
MCM 0240 S01 15348 Television Studies Lynne Joyrich

**Music**
MUSC 0021B S01 16559 Reading Jazz Matthew Richards McGarrell

**Philosophy**
PHIL 0300 S01 15422 Skepticism and Knowledge Felicia Nimue Ackerman
PHIL 0060 S01 15453 Modern Science + Human Values Nina R. Emery
PHIL 0350 S01 15454 Ancient Philosophy Mary Louise G. Gill
PHIL 1400 S01 15425 Ethics in the Novel Felicia Nimue Ackerman
PHIL 1590 S01 15411 Philosophy of Science David P. Christensen
PHIL 1750 S01 15510 Epistemology David P. Christensen

**Physics**
PHYS 1270 S01 15185 Extragalactic Astronomy TBD

**Political Science**
POLS 0820U S01 15466 Drug War Politics Peter R. Andreas
POLS 1822I S01 15489 Geopolitics of Oil and Energy Jeffrey D. Colgan
POLS 1823Y S01 15436 Social Attitudes and their Imp Katherine Tate
POLS 1823Y S01 15436 Global Governance Gina Tannenwald
POLS 1824B S01 15469 Post Conflict Politics Robert A. Blair
POLS 1824J S01 15530 Culture, Identity and Development Prema Singh
POLS 1824L S01 15453 Environmental Political Though Claire Simon Monique Braull
POLS 1910 S01 15545 Senior Honors Thesis Preparatn Tatiana Neumann

**Portuguese and Brazilian Studies**
POBS 0400 S01 15832 Writing + Speaking Portuguese Naomi Parker
POBS 0810 S02 15859 Cross-Cultural Identities Patricia I. Sobral
POBS 0850 S01 16523 Comp Appr Lits Brazil + USA Luiz Fernando Valente
POBS 0910 S01 15836 On the Dawn of Modernity Onisimo T. Almeida
POBS 1030 S01 15857 Adv Lang Study/Beginning Spanish Leonor Simas-Almeida

**Public Health**
PH 0550 S01 16445 Pain and the Human Condition Nisha Gupta Trivedi
PH 1070 S01 16436 Brd of Disease in Devel Cntry Stephen T. McGarvey
PH 1910 S01 16438 Public Health Senior Sem Eric B. Loucks

**Public Policy**
PLCY 0100 S01 16783 Introduction to Public Policy Robert B Hackey

**Religious Studies**
RELS 0022 S01 16708 Introduction to the New Testament Nathaniel P DesRosiers
RELS 0090K S01 15384 Christmas in America Daniel Vaca
RELS 0600C S01 15386 Radical Islam Nancy Khalek
RELS 1000 S01 15386 Methods in Religious Studies Paul E. Nahme

**Russian**
RUSS 0320E S01 15182 Crime and Punishment Vladimir Golstein
RUSS 1290 S01 15145 Russian Lit in Translation I Alexander Levitsky
RUSS 1967 S01 15301 Russian Postmodernism Fabrizio Fenghi

**Slavic**
SLAV 1300 S01 15148 Sociolinguistics Masako Ueda Fidler

**Sociology**
SOC 0300F S01 18296 Unequal From Birth Margot Jackson
SOC 1010 S01 16297 Classical Sociological Theory Pagel Henry
SOC 1340 S01 16302 Prm/Method Geogrphc Info Systm Rachel S. Franklin
SOC 1620 S01 16305 Globalization/Social Conflict Patrick G. Heiler
SOC 1870L S01 16721 Economic Foundations of Life Daniel Hirschman
SOC 1871R S01 16306 Knowledge Ntwks, Gbl Transf Michael D. Kennedy
SOC 1950 S01 16307 Senior Seminar Carrie E. Spearin

**Theatre Arts and Performance Studies**
TAPS 0100 S01 16015 Playwriting I TBD
TAPS 0100 S02 16016 Playwriting I Elmo Terry-Morgan
TAPS 0200 S01 15995 Playwriting II TBD
TAPS 1230 S01 16012 Global Theatre and Performance Rebecca Schneider

**Urban Studies**
URBN 0210 S01 15162 The City/Intro to Urban Study Dietrich Neumann
URBN 15115 S01 16116 Down Town Development Robert E. Azar
URBN 1870M S01 15318 Urban Regimes in Amer Republic Marlon E. Orr
URBN 1870N S01 15117 Cultur/Soci Life Built Envirmt Samuel Zipp

**Visual Art**
VISA 1800C S01 16451 Honors Seminar Theresa Claire Gan

**Spring 2018**

**African Studies**
AFRI 0710A S01 24058 Racial/Gender Politics-Brazil Keisha-Khan Y. Perry
AFRI 0990 S01 24259 Black Lavendr-Gay+Lesbn Plays Elmo Terry-Morgan

**American Studies**
AMST 0150P S01 24653 The Teen Age: In Cold War Amer Richard Alan Meckel

**Anthropology**
ANTH 1000 S01 24686 Intro to Cultural Anthropology Bhrigupati Singh
ANTH 1030 S01 25326 Pre-Columbian Art and Architec Stephen D. Houston
ANTH 1111 S01 24813 Anthropology of China Katherine A. Mason
ANTH 1940 S01 24675 Ethnographic Research Methods Lina M. Fruzzetti

**Applied Mathematics**
APMA 1360 S01 24794 Topics in Chaotic Dynamics John Mallet-Paret

**Archaeology and Ancient World**
ARCH 1175 S01 25113 Archaeology Matters! John F. Cherry

**Assyriology**
ASYR 1100 S01 24152 Gods/Myths in Mesopotamia Matthew T. Rutz

**BioMed-Neuroscience**
NEUR 1540 S01 25197 Learning and Memory Monica Linden
NEUR 1600 S01 25248 Experimental Neurobiology John J. Stein
NEUR 1600 S02 25390 Experimental Neurobiology John J. Stein

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Biology
BIOL 1920D S01 24622 Race, Difference + Biomed Rsch Lundy Braun

Business, Entrepreneurship and Organizations
BEO 1940A S01 24773 BEO Capstone II TBD
BEO 1940B S01 24774 BEO Capstone II TBD

Chemistry
CHEM 1450 S01 25277 Advanced Organic Chemistry TBD

Classics
CLAS 0210R S01 24573 Revolutionary Classics Johanna M. Hanink
CLAS 0400 S01 24561 Ancient Comedy + Its Influence Stephen E. Kidd
CLAS 0660 S01 24575 The World of Byzantium Elfratarios Papaoannou
CLAS 0995 S01 25383 India’s Classical Perf Arts David Buchta
CLAS 1120U S01 24570 Presidents/Western Tradition Joseph Michael Pucci
CLAS 1750N S01 25384 Marriage in the Ancient World Pura Nieto Hernandez

Cognitive, Linguistic and Psychological Sciences
CLPS 1193 S01 24940 Laboratory in Genes + Behavior Kevin G. Bath
CLPS 1420 S01 24949 Cognitive Neuropsychology Elena Kristie Festa

Czech
CZCH 0320A S01 24133 Czech Animation Masako Ueda Fidler
CZCH 0320A S02 24134 Czech Animation Masako Ueda Fidler

East Asian Studies
East Asian Studies

Economics
ECON 1486 S01 25083 Economic Analysis of Political Daniel J. D’Amico

Education
EDUC 0400 S01 24086 Amer College/University-1960’s Luther Spehr
EDUC 1730 S01 24087 Amer Higher Ed in Hist Contxt Luther Spehr
EDUC 1880 S01 24092 Soc Context of Learning/Devel Jin Li

Engineering
ENGR 0120A S01 25164 Crossmg Consumr Chasm by Desgn Richard D. Fleeter
ENGR 1010 S02 25217 Entrepreneurial Process Jason D. Harry

English
ENGL 0100R S01 24486 American Histories and Novels Daniel Kim
ENGL 0200X S01 25411 Unrealism: Science Fiction TBD
ENGL 0200Y S01 24949 Shakespeare James A. Kuzner
ENGL 1310H S01 24493 Origins of American Lit James F. Egan

Environmental Studies
ENVS 1910 S01 24469 The Anthropocene Bathsheba R Demuth
ENVS 1925 S01 24468 Energy Policy and Politics Dawn King

French Studies
FREN 0760A S01 24640 Intro l’analyse litteraire Thangam Ravindranathan
FREN 1110F S01 24639 Le Roman contemporain Thangam Ravindranathan
FREN 1510C S01 24621 A table! Annie J. Wart
FREN 1510H S01 24638 A nous deux la mode Stephanie A Ravillon
FREN 1610C S01 24834 Atelier d’ecriture Youenn Yves J Kervennic
FREN 1900H S01 24645 La France en guerre Gretchen Schultz

Gender and Sexuality Studies
GNSS 0120 S01 25443 Intro Gendr/Sexuality Studies Drew Walker

Hispanic Studies
HISP 0760 S01 24410 Transatlantic Crossings TBD
HISP 1290U S01 24412 Span Civ War in Visual Culture Sarah L. Thomas
HISP 1500L S01 25327 Theory + Practice: Translation Sarah L. Thomas

History of Art and Architecture
HIAA 0081 S01 24267 Architecture of the House Ithahan I. Osayimwese
HIAA 1560A S01 24264 Italy and the Mediterranean Evelyn Lincoln

History
HIST 1967E S01 25159 Mexico Since 1940 Robert Douglas Cope

Italian Studies
ITAL 1020 S01 25057 Boccaccio’s Decameron Massimo Riva

Japanese
JAPN 1310 S01 24290 Japanese Linguistics Kikuko Yamashita

Judaic Studies
JUDS 0061 S01 24141 Foreigner, Refugee, + Minority Paul E. Nahme
JUDS 0682 S01 24869 Bible Became Holy Michael L. Satlow
JUDS 1614 S01 24143 Heidegger, the Jews, + Crisis Paul E. Nahme
JUDS 1711 S01 24144 History of Israel Rachel Rojanski
JUDS 1753 S01 24146 Blacks + Jews Rachel Rojanski

Literary Arts
LITR 0210A S01 24846 Fiction Writing II Joanna E. Howard
LITR 0210A S02 24847 Fiction Writing II TBD
LITR 0710 S01 24849 Writers on Writing Seminar TBD
LITR 1010A S01 24843 Advanced Fiction Meredith Steinbach
LITR 1010B S01 24850 Advanced Poetry Monica M de la Torre
LITR 1110N S01 24851 Wittgenstl Potntial Litter Peter Gale Nelson
LITR 1150B S01 24842 Foreign Home: Intercsl Arts Thalia L. Field

Modern Culture and Media
MCM 0150 S01 24313 Text/Video/Culture Bonnie H. Honig
MCM 0902E S01 25540 Layouts Modern Media + Design Seungyeon Jung

Philosophy
PHIL 0110 S01 24387 The Place of Persons David P. Christensen
PHIL 0360 S01 24369 Early Modern Philosophy Charles Larmore
PHIL 0500 S01 24356 Moral Philosophy Nomy Arpaly
PHIL 0880 S01 24355 Ethcl Themes Amer Short Story Felicia Nimue Ackerman
PHIL 1670 S01 24363 Time Nina R. Emery

Physics
PHYS 0560 S01 24171 Experiments in Modern Physics TBD
PHYS 1560 S01 24175 Modern Physics Laboratory TBD
PHYS 1600 S01 24176 Computational Physics TBD

Political Science
POBS 0110 S01 24241 Intro to Political Thought Alexander H. Gourevitch
POBS 0920A S01 24451 Bleeding Heart Libertarianism John O. Tomasi
POBS 1821I S01 24383 Issues in Democratic Theory Corey L. Brettschneider
POBS 1821J S01 24549 RI Government and Politics TBD
POBS 1821L S01 24419 IR: Russia, Europe and Asia Linda C. Cook
POBS 1823N S01 24458 Nationalism: Problems, Paradox Tatiana Neumann
POBS 1823Q S01 24434 Democratic Theory and Globaliz Richard O. Snyder
POBS 1824A S01 24429 Counterinsurgency and Civil Wa Nicholas L. Miller
POBS 1824C S01 24454 Political Communication Richard A. Arendt
POBS 1824M S01 24460 Pol of Race + Criminal Justice Paul F. Testa
POBS 1824P S01 24456 Polycracy TBD
POBS 1920 S01 24457 Senior Honors Thesis Preparatn Tatiana Neumann

Portuguese and Brazilian Studies
POBS 0400 S01 24657 Writing + Speaking Portuguese Naomi Parker
POBS 0620 S01 24659 Map Portugues-Speak Cltr:Ptugl Leonor Simas-Almeida
POBS 0990 S01 24669 Mapping Cross-Cult. Identities Patricia I. Sobral

Religious Studies
RELS 0015 S01 24334 Sacred Stories Susan Ashbrook Harvey
RELS 0056 S01 24335 Spiritual But Not Religious Daniel Vaca
RELS 0068 S01 24337 Religion and Torture Stephen S. Bush
RELS 1320D S01 26228 Byzantine Desires Susan Ashbrook Harvey

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General Regulations

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).

Russian
RUSS 1550 S01 25422 Beyond The Kremlin: Rus Cul+Pol Fabrizio Fenghi

Science and Society
SCSO 1000 S01 24193 Theories and Controversies Joan L. Richards

Sociology
SOC 0020 S01 25004 Perspectives on Socl Interactn Gregory C. Elliott
SOC 0300A S01 25074 Contrasting Societies Michael D. Kennedy
SOC 1420 S01 25077 Violence and Society Gregory C. Elliott
SOC 1870A S01 25078 Investing in Social Change Mathew Johnson
SOC 1871D S01 25080 Sociology of Development Andrew M. Schrank

Theatre Arts and Performance Studies
TAPS 0100 S01 24918 Playwriting I TBD
TAPS 0200 S01 24930 Playwriting II TBD
TAPS 1240 S01 24919 Perform Histriogrph/Theatr Hst Patricia Ybarra
TAPS 1250 S01 24920 20th-Cent W Theatre/Performanc Rebecca Schneider
TAPS 1380 S01 24916 Mise en Scene Spencer Golub
TAPS 1430 S01 24864 Russian Theatre and Drama Spencer Golub

University Courses
UNIV 1520 S01 24654 The Shaping of World Views Onesimo T. Almeida

Urban Studies
URBN 1200 S01 24123 The U.S. Metropolis, 1945-2000 Samuel Zipp
URBN 1870J S01 24274 Poltcs of Community Organizing Marion E. Orr
URBN 1870S S01 24275 The City, the River, + the Sea Rebecca Carter
URBN 1870T S01 24124 Transportation: Planning Persp Robert E. Azar

Visual Art
VISA 1800P S01 25135 Art/Work: Professionl Practice Heather Darcy Bhandari
Course Descriptions

**AFRICAN STUDIES**

**AFRI 0210. Afro Latin Americans and Blackness in the Americas.**
This course focuses on the position of Blacks in the national histories and societies of Latin America from slavery to the present-day. Emphasis is on a multidisciplinary engagement with issues and the exposure of students to the critical discussion of national images and realities about blackness and Africa-descended institutions and practices. The role of racial issues in national and transnational encounters and the consequences of migration of people and ideas within the hemisphere are explored.

DPLL Fall AFR0210 S01 16406 TTh 2:30-3:50(03) (A. Dzidzienyo)

**AFRI 0670. Global Black Radicalism.**
The decade from the mid-Sixties until the mid-Seventies witnessed the rise of Black Radicalism as a global phenomenon. The emergence of Black Power in the US, Brazil and the Caribbean, the consolidation of liberation struggles in Portuguese Africa and the rise of a Black Consciousness trend in Apartheid South Africa all represent key moments. What led young activists to embrace “Black Power”? What led to the emergence of Marxist movements in Portuguese Africa? What events in the Caribbean gave ascendency to radical tendencies? And what forces contributed to the decline of these movements? This course seeks to answer these questions.

DPLL SOPH Fall AFR0670 S01 15298 Th 4:00-6:30(04) (B. Meeks)

**AFRI 0710A. Racial and Gender Politics in Contemporary Brazil.**
Brazil is commonly understood as an example of a “racially democratic” nation, but as scholars have recently shown, racism permeates all aspects of Brazilian society. This course traces the development of the theorization of race, racial identity and race relations in contemporary Brazil. The approach of the course will be interdisciplinary, drawing upon works from anthropology, literature, history, music, and film. Topics will include colonialism and enslavement, nationalism, social activism and popular culture. We will also consider how Brazilian social relations differ from or conform to other racialized patterns in other nation-states in the Americas. Particular attention will be placed on the interrelationship between race, gender, class, and nation.

WRIT Spr AFR0710A S01 24058 TTh 10:30-11:50(09) (K. Perry)

**AFRI 0990. Black Lavender: Black Gay/Lesbian Plays/Dramatic Constructions in the American Theatre.**
An interdisciplinary approach to the study of plays that address the identities and issues of black gay men and lesbians and offers various perspectives from within and without the black gay and lesbian artistic communities. Focuses on analysis of unpublished titles. Also includes published works by Baraka, Bullins, Corbitt, Gibson, Holmes, West, and Pomo Afro Homos. Some evening screenings of videotapes. Enrollment limited to 40. WRIT DPLL Spr AFR0990 S01 24259 TTh 1:00-2:20(10) (E. Terry-Morgan)

**AFRI 1020C. The Afro-Luso-Brazilian Triangle.**
Examines three historical components of the South Atlantic in terms of history, culture, and contemporary political and economic consequences. European colonialism in Africa and Brazil constitutes the baseline for this exploration, but the long and tardy nature of Portuguese colonialism in Africa in comparison with other European colonial powers, especially in its post-World War II manifestations, is our starting point. Enrollment limited to 40. DPLL Spr AFR1020C S01 25095 Th 4:00-6:30(17) (A. Dzidzienyo)

**AFRI 1050A. Advanced RPM Playwriting.**
Third level of RPM Playwriting; for students that have successfully completed RPM Playwriting and Intermediate RPM Playwriting (workshop). Instructor permission. DPLL Spr AFR1050A S01 24260 Th 4:00-6:30(17) (E. Terry-Morgan)

**AFRI 1050D. Intermediate RPM Playwriting.**
Second level of RPM Playwriting; for students that want to continue developing their RPM plays or want to begin a new project (workshop).

DPLL Spr AFR1050D S01 24261 TTh 4:00-6:30(17) (E. Terry-Morgan)

**AFRI 1050E. RPM Playwriting.**
Research-to-Performance Method (RPM) Playwriting guides students through the process of developing new plays that are informed by scholarly research (workshop).

DPLL Spr AFR1050E S01 24262 TTh 4:00-6:30(17) (E. Terry-Morgan)

**AFRI 1050G. Narrating the Radical Self.**
How black women in the United States and elsewhere have written about their lives in autobiographies will be the focus of this course. We will discuss black women’s use of autobiographical writing to document their own individual experiences in political movements as well as to provide key insights into how black people throughout the black diaspora have organized in recent history. Enrollment limited to 20.

Spr AFR1050G S01 24057 W 3:00-5:30(14) (K. Perry)

**AFRI 1050V. Rhythm and Resistance.**
This course will investigate the crucial cultural and political contributions of the African Diaspora in the formation of the contemporary Americas through an analysis of the rhythms they have produced in different national settings. We will use these rhythms as a guide to understand the peoples, places and conditions under which they were created and sustained. Through classroom discussion and historical and music-analysis students will understand the relationship of these rhythms to larger issues like nationalism, migration, colonialism, globalization, the politics of sexuality, gender and race and to understand the different meanings and practices of resistance.

Fall AFR1050V S01 15048 T 4:00-6:30(09) (R. Mann-Hamilton)

**AFRI 1060E. West African Writers and Political Kingdom.**
Do West African writers have a role to play in the changing political landscape of their countries? An examination of the ways and means through which a select group of West African writers have dealt with issues that relate to the role of the state in the management of individual and group relations, the politics of gender, civil and military relations, and the construction of new forms of civil society. Enrollment limited to 20.

DPLL Spr AFR1060E S01 25096 W 3:00-5:30(14) (A. Dzidzienyo)

**AFRI 1110. Voices Beneath the Veil.**
Thirty plays, written by Afro-American playwrights and presented on the American stage between 1858 and the 1990s, are examined as cultural and historical documents of Afro-American realities. Supplementary readings from the humanities and social sciences provide critical framework for in-class discussions and student papers. Instructor permission required.

WRIT DPLL Fall AFR1110 S01 15299 TTh 10:30-11:50(13) (E. Terry-Morgan)

**AFRI 1150. Afro-Caribbean Philosophy.**
An introduction to the field of Afro-Caribbean philosophy. The first half focuses on the history of the field, identifying its African background and surveying some of its major schools, such as the Afro-Christians, the postcolonials, the historicists, and existentialists. The second half consists of a more intensive comparative focus on the ontologies and epistemologies of two of these schools.

DPLL Spr AFR1150 S01 24471 MWF 2:00-2:50(07) (P. Henry)

**AFRI 1210. Afro-Brazilians and the Brazilian Polity.**
Explores the history and present-day conditions of Afro-Brazilians, looking specifically at the uses of African in contemporary Brazil, political and cultural movements among Afro-Brazilians, domestic politics and its external dimensions, and Brazilian race relations within a global comparative framework. Texts from a variety of disciplines. A reading knowledge of Portuguese is not required but students so advantaged should inform the instructor.

DPLL Fall AFR1210 S01 16407 W 3:00-5:30(17) (A. Dzidzienyo)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
AFRI 1360. Africana Studies: Knowledge, Texts and Methodology.  This course will explore the issues of Africana Studies as a discipline by engaging in a series of critical readings of the central texts, which laid the protocols of the discipline. The course will also raise issues of knowledge production and methodologies. This course is a senior capstone seminar. Open to all senior Africana Studies concentrators; others by instructor permission only. Enrollment limited to 25. DLL

Fall SPR AFRI1360 S01 24258 M 3:00-5:30(13) (B. Meeks)

AFRI 1970. Independent Reading and Research.  Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

AFRI 2001. Theories of Africana Thought: Intellectual History and Critical Theory.  This course will be a close reading of the various ideas, theories and practices of the thinkers, writers, artists and activists whose work and practices have constituted an Africana intellectual tradition. In conducting this review we will examine questions around the formation and the history of thought and intellectual traditions in general. We will also think about the various fields of knowledge which have shaped Africana thought. The course therefore will spend some time working through the different meanings of intellectual work and critical thought and theory. Enrollment limited to 12 graduate students.

Fall AFRI2001 S01 15480 Th 10:00-12:30 (P. Henry)

AFRI 2101. Methods in Africana Studies.  This graduate seminar brings together various methodological and theoretical approaches to interpreting Africana life, culture, thought, and politics. Placing special emphasis on emergent scholarship that shapes and reshapes the discipline of Africana Studies, we examine a selection of humanistic and social scientific studies of various local, national, and international contexts. Texts demonstrate the ways in which innovative interdisciplinary methods are crucial for understanding the complexity of the Africana world. We will give attention to the strategies scholars utilize to formulate their research questions, design their methodologies, and create new ideas that contribute to the advancement of Africana Studies scholarship.

Fall AFRI2101 S01 15046 M 3:00-5:30(15) (K. Perry)

AFRI 2450. Exchange Scholar Program.  For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination. Section numbers may vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall AFRI2450 S01 14937 Arranged 'To Be Arranged'

AFRI 2502. Race and Nation in the Spanish Caribbean.  For five centuries, the Caribbean has stood at a crucial crossroads in the unfolding history of the Americas, Europe, and the African diaspora. This seminar engages in a comparative survey of the intertwined dynamics of race and national construction in the making of the Spanish-speaking Caribbean. The focus of the seminar will be placed on the on-going centrality of race in these island nations. Drawing on a range of readings in history, music, poetry and anthropology, this course will explore the overlapping historical contexts of Cuba, Puerto Rico, and the Dominican Republic.

Spr AFRI2502 S01 24059 T 4:00-6:30(16) (R. Mann-Hamilton)

AFRI 2970. Preliminary Examination Preparation.  For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall AFRI2970 S01 14938 Arranged 'To Be Arranged'
Spring AFRI2970 S01 23973 Arranged 'To Be Arranged'

AFRI 2980. Graduate Level Independent Reading and Research.  A program of intensive reading and research. Section numbers may vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall AFRI2990 S01 14939 Arranged 'To Be Arranged'
Spring AFRI2990 S01 23974 Arranged 'To Be Arranged'

AFRI XLIST. Courses of Interest to Concentrators in Africana Studies.  Fall 2017

The following courses may be taken for concentration credit. Please see the sponsoring department for the time and location of each course.

English ENGL 0710B African American Literature and the Legacy of Slavery
ENGL 2760M Postcoloniality and Globalism

Spring 2018

The following courses may be taken for concentration credit. Please see the sponsoring department for the time and location of each course.

English ENGL 17101 Harlem Renaissance: The Politics of Culture
ENGL 17103 Modern African Literature

American Studies

American Studies

AMST 0150C. Bodies of Knowledge: Gender, Race and Science.  This course examines how science and medicine have located racial and sexual differences in the human body and gendered the natural world from the seventeenth through the twentieth centuries, with a focus on the nineteenth and twentieth centuries. We will consider historical changes in the production of scientific knowledge about gender, race, and sexuality, as well as debates about who participates in scientific work. FYS

Fall AMST0150C S01 16075 Arranged 'To Be Arranged'

AMST 0150E. Skill: From to the Medieval Workshop to the Maker Movement.  What does it mean to be skilled? How does a combination of mechanical and material knowledge, expertise in the use of tools, and physical ability allow someone to make and repair things? How can we describe the intellectual and embodied knowledge of skills in words, images, and artifacts? How do personal skills fit into social and cultural settings? How are skills learned?

In this course we read the writings of skilled craftspeople and cultural critics to understand changes in concepts of skill; observe skilled practitioners in a variety of areas; learn new skills, and write about them.

FYS WRIT

Fall AMST0150E S01 16143 Arranged (S. Lubar)

AMST 0150P. The Teen Age: Youth, Society and Culture in Early Cold War America. An interdisciplinary and multimedia exploration of the experiences, culture, and representation of youth in the United States from the end of World War II through the beginning of the Vietnam War. Enrollment limited to 20.

WRT FYS

Spr AMST0150P S01 24653 M 3:00-5:30(13) (R. Meckel)

AMST 0191C. Race and Space: Segregation, Suburbanization, and Sites of Encampment.  Through a range of historical examples from the 20th century, Race and Space: Segregation, Suburbanization, and Sites of Encampment examines how interconnected forms of racial and spatial difference are produced, reproduced, and transformed in various U.S. locales. This class will provide students with a unique opportunity to conduct primary-source research in a number of archives and apply the course themes to local historical issues of race and space. Students will gain exposure to a wide variety of case studies, disciplines, methodologies, and approaches in which scholars are writing, thinking, and publicly displaying issues of race and space.

WRT DPLL

Fall AMST0191C S01 16491 Th 9:00-10:20(08) (J. Cortez)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
AMST 0191D. Cry for Justice: Asian American Literature of Social Activism.
What insights can literary genres, including poetry, fiction, autobiography and memoir, provide into the struggle for social justice and fight for inclusion in the United States? What role can Asian American literature play in addressing and illuminating past and present injustices? With these questions in mind, through reading protest literary works by Asian American authors, this course will examine the hidden history of Asian immigrant radicalism, dismantle stereotypes against Asian Americans, and assert that literature has been and remains a fundamental site for Asian Americans’ active resistance to racial, class, gender and sexual oppression. DPLL WRIT
Fall AMST0191D S01 16718 MW 8:30-9:50(01) (Y. Feng)

AMST 1500A. Research and Transnational Communities: Qualitative Fieldwork Methods.
This course will equip students with the skills to design and implement their own transnational American Studies or Public Humanities research project. We will consider different qualitative social science research methods including, ethnographic participant observation, formal and informal interview techniques, and survey data analysis. Students will learn how different methodologies lend unique insights into specific research questions, and will be able to identify different methodological bases for empirical findings across diverse transnational social problems. Throughout the course, we will explicitly engage the personal, public, and ethical concerns involved with conducting research with transnational communities, including researcher positionality, privilege, ethics, and responsibility.
Fall AMST1500A S01 15809 W 3:00-5:30(17) (E. Shih)

AMST 1600C. The Anti-Trafficking Savior Complex: Saints, Sinners, and Modern-Day Slavery.
How can we understand the global movement to combat human trafficking within critical frameworks on "industrial complexes"? Drawing from scholarship on the prison industrial, non-profit industrial, and white savior complex this course examines human trafficking through the lens of race, class, gender, and national forms of power and subjectivity. Readings will problematize the so-called saints and sinners of the movement, investigating various global helping projects that exist to stop "modern day slavery." DPLL
Fall AMST1600C S01 16145 MWF 12:00-12:50(12) (E. Shih)

Examines the literature of first and second generation immigrant/ethnic writers from 1900 to the 1970’s. Attempts to place the individual works (primarily novels) in their literary and sociocultural contexts, examining them as conscious works of literature written within and against American and imported literary traditions and as creative contributions to an ongoing national discourse on immigration and ethnicity. DPLL
Fall AMST1611A S01 15808 TTh 1:00-2:20(10) (R. Meckel)

AMST 1611O. Early American Film: The Birth of an Industry.
American film-making from its origins as a technological amusement to the period of classic Hollywood cinema. Particular attention given to representations of gender, race, and ethnicity with comparisons to the evolution of European film. The Birth of a Nation (1915) by by D. W. Griffith will be a key text in dialogue with African-American director Oscar Micheaux's Within Our Gates (1920). DPLL
Spr AMST1611O S01 25388 MWF 12:00-12:50(05) (B. Haviland)

AMST 1611Z. The Century of Immigration.
Examines in depth the period of immigration that stretched from the 1820s through the 1920s and witnessed the migration of over 36 million Europeans, Asians, Canadians, and Latin Americans to the United States. Explores causal theories of migration and settlement, examines the role of family, religion, work, politics, cultural production, and entertainment in immigrant/ethnic communities, and traces the development and impact of federal immigration policy.
Spr AMST1611Z S01 24634 TTh 1:00-2:20(10) (R. Meckel)

AMST 1700K. Race in the Americas: A Hemispheric Perspective.
This junior seminar engages debates in Ethnic Studies, Latin American Studies, sociology and history regarding the role of race in the U.S. and Latin America. Problematizing the depiction of Latin America as a harmonious racially mixed society and the U.S. as racially divided nation, students will look beyond binary frameworks to examine how racial logics are constructed historically, situationally and relationally. Readings highlight the interconnected nature of racial logics across the region, facilitated by immigration and transnational social movements in the context of a shared European colonial past, U.S. imperialism and emergent nationalhood. DPLL
Fall AMST1700K S01 16720 Th 4:00-6:30(04) (K. Escudero)

AMST 1700L. Bad Rehab: Rehabilitation Regimes of the American Ethic.
This course examines the American obsession with rehabilitation in various social settings ranging from alcoholism and drug use to HGTV-style home repair. We investigate the theoretical foundations of rehabilitation within the scholarly traditions of criminology, alongside empirical examples ranging from rescue and rehabilitation of victims of sex trafficking in Asia, to the global implementation of mandatory prison labor as a measure to earn "good time" and reduced sentences, to the entrepreneurial restoration of abandoned row houses in Philadelphia’s "recovery house movement" and its impacts on gentrification.
Course title adopted from APNSW "Bad Rehab" parody of Lady Gaga's "Bad Romance." DPLL
Spr AMST1700L S01 26122 W 3:00-5:30(14) (E. Shih)

AMST 1800. Honors Seminar.
This seminar is for second-semester junior American Studies and Ethnic Studies concentrators who are interested in writing an honors thesis in their senior year. The outcome of this course will be a proposal for the honors thesis along with a bibliography and a research plan and schedule. Topics covered will be the research methods associated with different disciplines; how to make the thesis interdisciplinary; integrating public projects and new media into a thesis. Open to juniors concentrating in American Studies and Ethnic Studies. Enrollment limited to 20. S/NC
Spr AMST1800 S01 24552 F 3:00-5:30(15) (B. Haviland)

AMST 1900H. New Media as a Tool for Social and Political Change.
This course will take a critical, theoretical, and practical approach to the examination of new media as a tool for challenging inequality and working toward goals of social justice. In addition to foundational readings on power, media, social change, network theories, and others, we will also have hands on opportunities to work in mediums such as blogging, video production, podcasting, and more, utilizing the resources available at BROWN. The goal is for students to leave the course with an understanding of the cultural, political, and personal possibilities and limitations of social and new media in the realms of advocacy and social justice.
Spr AMST1900H S01 24521 Th 4:00-6:30(17) (A. Keene)

AMST 1900P. Essaying Culture.
This course is interested in the essay as form. As a verb, essay means "to make an often tentative or experimental effort to perform." We will explore through reading and our own writing the poetic, gnomic, and often desultory moves the essay makes as it seeks to understand its cultural objects. Like the novel, the essay is an omnivorous form. It consists of fragments, poetry, personal reflection, lists, rational argument, and much more as it winds its way to understanding. We will be reading a range of essays, as well as essays as the form of the WRIT
Fall AMST1900P S01 16106 Th 4:00-6:30(04) (R. Rodriguez)

AMST 1900T. Disability: History, Theory, and Bodily Difference.
This seminar explores the history of disability across cultural, legal, medical, and political dimensions of American life. We will consider the changing meanings of disability, the history of disability activism and communities, representations of disabilities, and the relationship between technology and the body. We will also discuss the intersections between disability and other categories of difference such as gender, race, and sexuality. DPLL
Spr AMST1900T S01 24652 M 3:00-5:30(13) (D. Weinstein)
AMST 1901B. Form Matters: Contemporary Short Fiction

Form Matters is an advanced seminar in reading contemporary short fiction, mainly centered on US writers. The class particularly focuses on socially-attuned and historically-minded neo-formalist analyses of literature. Fiction readings will be supplemented with relevant critical readings from both scholars and practicing writers. Students will be expected to engage in rigorous discussion of the material. Goals of the course include introducing you to a relevant critical vocabulary for discussing form, deepening your familiarity with contemporary US short fiction, and improving your oral and written communication skills.

Spr AMST1901ES01 24649 TTh 2:30-3:50(11)  (R. Rodriguez)

AMST 1905X. Public Memory: Testimony, Memorial, Ritual.

This seminar explores theories and practices of public memory by studying three related topics and media. Questions about the relation of history and memory are pursued by reading verbal testimony. Questions about commemoration are developed by looking at material objects and public spaces. Questions about embodied memory are explored by witnessing trauma, performance, and ritual. Readings will include Freud, Nora, Derrida, Halbwachs, Laub, Savage, Connerton, Taylor and Young. Rhode Island will provide our field for testing theories about how public memory works as we seek verbal, material, and embodied signs of Wampanoag, Cape Verdean, and European pasts.

WRIT DPLL Fall AMST1905XS01 16107 Th 4:00-6:30(04)  (B. Haviland)

AMST 1906Q. The History of Children and Childhood in America.

We will examine the evolution of childhood—as both a socioculturally constructed concept and a lived experience—from the colonial period to the present. In doing so, we will explore the impact of race, gender, class, and region on those constructions and experiences and consider the interpretive possibilities and challenges offered by various types of evidence: visual and literary representations, memoirs, child rearing advice, toys and play, children’s literature, clothing, and protective and restrictive laws.

Fall AMST1906CM01 15631 M 3:00-5:30(15)  (R. Meckel)

AMST 1970. Independent Reading and Research.

Required of all honors candidates in the senior year. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

S/NC Fall AMST2010 S01 15807 F 3:00-5:30(11)  (M. Martinez)

AMST 2020E. Introduction to Interdisciplinary Methods.

Introduction to interdisciplinary studies required of all first-year graduate students in American Studies. Graduate students from other departments may enroll with permission of the instructor.

Fall AMST2020ES01 15806 W 3:00-5:30(17)  (C. Frank)

AMST 2220J. Introduction to Critical Race Theory.

This graduate-level course offers an introduction to the discipline of American Studies through a close reading of four important texts representing different methodologies and theories within the discipline. We will also read a series of seminal articles focused on transnationalism, highlighting the significance of border-crossings to the American experience throughout the semester. The goal of the course is to familiarize students with pedagogical approaches within American Studies, through active seminar discussions, fieldtrips within the community, and work with material and visual media as well as secondary texts.

Fall AMST2220JS01 15630 W 3:00-5:30(17)  'To Be Arranged'

AMST 2450. Exchange Scholar Program.


This course explores the mechanics of a doctorate degree in American Studies. We will explore the constitution of our field through the elaboration of field exam lists and narratives, query its pedagogical application in the design of undergraduate syllabi, and begin to outline and enact our participation in the profession both within and beyond the academy. At the end of this class, students will have constructed a portfolio that will assist their progress towards a degree and provide the tools with which to chart pathways once a degree is in hand.

S/NC Fall AMST2520 S01 15810 F 3:00-5:30(11)  (D. Weinstein)

AMST 2660. Projects in Public Humanities.

Devoted to one or more advanced projects in Public Humanities not covered in detail by the regular courses. Projects in public humanities provide practical, hands-on project and group project management experience that is essential for careers in museums, historic preservation, and cultural agencies. Students will work with faculty advisor to project completion. Written permission and topic description required. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. This course is repeatable for credit. Prerequisite: AMCV 2650 or demonstrated ability of equivalent experience. Instructor permission required.

AMST 2920. Independent Reading and Research.

Section numbers vary by instructor. Search Banner by instructor name to find the correct section number and CRN to use when registering for this course. You will need instructor permission to register and the course may be repeated with different instructors. Open to American Studies graduate students only. S/NC

AMST 2921. Independent Reading and Research.

Section numbers vary by instructor. Search Banner by instructor name to find the correct section number and CRN to use when registering for this course. You will need instructor permission to register and the course may be repeated with different instructors. Open to American Studies graduate students only. S/NC

AMST 2922. Independent Reading and Research.

Section numbers vary by instructor. Search Banner by instructor name to find the correct section number and CRN to use when registering for this course. You will need instructor permission to register and the course may be repeated with different instructors. Open to American Studies graduate students only. S/NC

AMST 2923. Independent Reading and Research.

Section numbers vary by instructor. Search Banner by instructor name to find the correct section number and CRN to use when registering for this course. You will need instructor permission to register and the course may be repeated with different instructors. Open to American Studies graduate students only. S/NC

Ethnic Studies

ETHN 1000. Introduction to American/Ethnic Studies.

Considers the U.S. as a society whose unifying identity is rooted in ethnic and racial diversity. Explores the historical and contemporary experiences of racial and ethnic groups in this country and analyzes different forms of representation of these experiences, as well as representations of the racial and ethnic stratification in the U.S. imagination.

Fall ETHN1000 S01 16108 MWF 1:00-1:50(06)  (E. Hoover)
ETHN 1200B. Contemporary Indigenous Education in North America.
In the past, formalized schooling in Indigenous communities was a tool of colonization and cultural genocide, forcing Native peoples to assimilate to western norms, values, and knowledge. However, contemporary Indigenous communities have managed to reclaim and reshape education for Native youth, utilizing innovative methods and technologies, as well as drawing upon generations of traditional and indigenous knowledges to create environments that promote academic achievement alongside culture. In this course we will focus on the ways Native communities are asserting their educational sovereignty, through culturally-relevant/ responsive curriculums, language immersion schools, indigenous charter schools, traditional ecological and scientific knowledges, and more.
Spr ETHN1200BS01 25389 W 3:00-5:30(14) (A. Keene)

ETHN 1200D. Latinx Literature.
This course will introduce students to a broad array of Latinx/o literature-fiction, poetry, and graphic novels. While there is a long tradition of Latina/o literature in the United States, we will focus primarily on a period from 1965 to the present. Aimed to familiarize students with debates in the field, the readings will also include critical essays. Enrollment limited to 15.
DPLL WRIT
Fall ETHN1200CS01 16109 TTh 2:30-3:50(03) (R. Rodriguez)

ETHN 1200E. Latinx Novel Lab.
This novel lab focuses on the Latinx novel from the 1960s to the present. Whereas most novel classes cover anywhere between 6-12 novels in a semester, you will leave this novel lab with knowledge of 72 novels. I want to treat this class as a laboratory experiment. Each student will read approximately 6 novels and present their findings to the class. Students will provide a written handout to accompany their presentation. These handouts will, among other things, offer a plot summary, key formal features, resonant themes, and connections between the novel read and the novels already presented on.
DPLL
Fall ETHN1200ES01 24914 TTh 10:30-11:50(09) (R. Rodriguez)

In many Native American communities the push to “eat local” is often based on reviving a traditional food culture as well as a way of promoting better health. This class explores the disparate health conditions faced by Native communities, and the efforts by many groups to address these health problems through increasing community access to traditional foods, whether by gardening projects or a revival of hunting and fishing traditions. We will examine the ways in which Native food movements have converged and diverged from general American local food movements, and the struggles they often face in reviving treaty-guaranteed food ways.
DPLL
Fall ETHN1750BS01 16110 Th 4:00-6:30(04) (E. Hoover)

ETHN 1750D. Transpacific Asian American Studies.
This is an advanced undergraduate seminar that is also open to American Studies and other graduate students for graduate credit. It is designed to help us think about the Pacific as a historical space where the Asian American formation is constructed, as goods, people and ideas circulate across the Pacific. We will explore ways in which these historical circuits and exchanges have shaped questions of identity and belonging, taking China and the Americas as our principal points of connection. We will read across a number of fields, including: Asian Studies, American Studies, Asian American Studies, Latin American and Caribbean Studies. DPLL
Fall ETHN1750CS01 16714 M 3:00-5:30(15) (E. Hu-Dehart)

ETHN 1750E. Transpacific Popular Culture.
General Tso’s Chicken is as American as apple pie, half the nation’s 8-year olds practice some “ancient” Asian form of mayhem, and K-pop is still big in Mexico City while Spidey is a political superhero in Hong Kong and Bangkok street protesters flash Mockingjay salutes. In this seminar, we will use three spaces of cultural production and consumption; music, food, and martial arts, to illuminate deep circuits of migration, labor, culture, and popular politics across and around the Pacific. DPLL
Fall ETHN1750ES01 16111 TTh 10:30-11:50(13) "To Be Arranged"

ETHN 1900E. Senior Seminar in Ethnic Studies.
No description available.
Spr ETHN1900ECS01 24641 M 3:00-5:30(13) (E. Hu-Dehart)

ETHN 1910. Independent Study.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Anthropology

ANTH 0066D. Who Owns the Past?.
Examines the role of the past in the present. Using examples from the U.S. and other parts of the world, we will look at how archaeological evidence is implicated in contemporary cultural and political issues. Students will learn that the past is not just the focus of archaeologists’ interest and scientific inquiries, but is also a subject romanticized by antiquarians, mobilized in nation-building, marketed for profit, re-enacted as entertainment, consumed by tourists, and glorified in commemoration. Understanding these different and competing valuations, claims, and uses of the archaeological past will provide an introduction to why the past matters in the present and to the future. Enrollment limited to 20 first year students. FYS DPLL
Spr ANTH0066ES01 25378 M 4:00-6:30 (P. Rubertone)

ANTH 0066N. Peoples and Cultures of Greater Mexico.
This course will focus on the cultural area known as Greater Mexico, incorporating Mexicans resident south of the Rio Grande, as well as the approximately 25 million Mexicans living permanently or for a time in the United States. Specific topics to be covered in the class include: urban peasants and rural proletarians, recent challenges to gender conventions, national and international migration, nationalism and the changing meanings of the Conquest and colonial periods, land and indigenous rights, everyday violence, machismo, popular culture, and protest and rebellion. Limited to first-year students. DPLL FYS
Spr ANTH0066NS01 24863 W 3:00-5:30(14) (M. Gutmann)

ANTH 0100. Introduction to Cultural Anthropology.
This course provides an introduction to cultural anthropology, surveying its defining questions, methods, and findings. We will examine the history and utility of anthropology’s hallmark method, ethnography, the long-term immersion of the researcher in the culture under study. We will compare cultural anthropology’s findings and comportment in other cultures to its conclusions and conduct in our own. No prerequisites. WRIT DPLL
Fall ANTH0100 S01 24866 MWF 11:00-11:50(04) (B. Singh)

This course offers students an opportunity to examine and analyze a range of contemporary global social problems from an anthropological perspective. We will explore human-environment entanglements with particular attention to intersecting issues of capitalism, international development, and state and non-state governance. Course materials will look at various kinds of work in, on, and with the environment, asking questions about the possibilities of over-working our landscapes, while addressing the potentials for social and environment justice and sustainability.
Fall ANTH0110 S01 15871 MWF 1:00-1:50(06) (S. Besky)

ANTH 0130. Myths Alive.
Myth is an important part of the architecture that sustains human culture and society. This course begins w/an account of the principal theoretical positions that’ve shaped anthropological understandings of myth as a living and guiding force in human communities in ancient times and in the present day. We’ll examine the expressions of myth in senses of place, social harmony, inequality, conflict, religious experience, and radical social change in a wide variety of historical and ethnographic settings. We’ll draw upon objects from Brown's Haffenreffer Museum to recognize them as material artifacts from mythological worlds. DPLL
Fall ANTH0130 S01 24867 TTh 10:30-11:50(09) (W. Simmons)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ANTH 0500. Past Forward: Discovering Anthropological Archaeology.
This course offers a broad journey through the human past, from material culture crafted by our evolutionary ancestors to the remnants of the recent historic past. To facilitate this journey, the class explores the methods, concepts, and theories that anthropologists employ in the study of past peoples, places, and things. Case studies stretch across the globe. As a hands-on endeavor, archaeology focuses on tangible evidence. In this course, small-group discussion, laboratory, and field exercises will complement lectures, leading to an understanding of how anthropologists study the past and how that knowledge affects the present.

ANTH 0800. Sound and Symbols: Introduction to Linguistic Anthropology.
This introduction to the study of language and culture considers how language not only reflects social reality but also creates it. We'll examine specific cases of broad current relevance, in the process learning how an analytical anthropological approach to language use lays bare its often hidden power. We'll consider how language creates and reinforces social inequality and difference, how language promotes and resists globalization, and how language is used creatively in performance, literature, film, advertising, and mass media. We will also consider how language does important social work in specific contexts, such as classrooms, courtrooms, medical settings, and political campaigns. DPLL

Survey of ancient art and building in ancient America, with a focus on Mexico, Central America, and the Andes. Underlying concepts include: meaning and method, cosmos and kingship, narrative and symbol, personality and authorship, empire and royal court. Rich collections of the Haffenreffer museum will form the focus of work in the class. DPLL WRIT

ANTH 1111. Anthropology of China.
This course introduces students to contemporary Chinese culture and society, w/a focus on the rapid changes that have taken place during the post-Mao reform era in the People's Republic of China (1978- present). Emphasis will be placed on the importance of historical and global context in developing an understanding of contemporary Chinese culture. Readings and lectures will draw primarily upon recent ethnographic work conducted in the PRC, but readings from the disciplines of history, political science, public health, and contemporary Chinese literature (in translation) will also be incorporated. Topics: family life, urbanization, housing, migration, gender, health/disease, labor, globalization, and cyberculture. WRIT

ANTH 1232. War and Society.
Cross-cultural and historical perspectives on war and its larger social context. Course readings and lectures use political economic, cultural, and feminist approaches to understanding war and its effects on social life. Case studies will be drawn from several eras and areas of the globe, including the Rwandan genocide, Central American countercultur and, archaeological and historical evidence from prehistory and historical periods. The course asks: What insights does burial give us about the human condition? How do human remains illuminate the lives of people in the past? What can mortuary practices tell us about beliefs and emotions? Current cultural and legal challenges to the excavation and study of the dead are also considered. DPLL

ANTH 1240. Religion and Culture.
Global events in recent years seem to defy the commonsensical idea that religious traditions would decline or disappear in the modern epoch. We examine classic theories and methods in the study of religion to understand the continuing vitality of spiritual contemplation, asceticism, myths, rituals, magic, witchcraft, experiences of healing, and other ways of thinking and acting that are typically associated with (or against) the concept of religion. DPLL

ANTH 1253. The Visual in Anthropology: Documentary Films and Society.
This lecture course entails an introduction of the history of anthropology complemented with cinematic documentary films. Anthropological text is used to demonstrate continuity between the visual and the written word in select films screened for the course. Weekly topics address the anthropology of exclusive authors to critically juxtapose their work with discussion on either the convergence or discontinuity in the uses of the documentary films. Do films inform us or deviate from our understanding of the written anthropological ethnographies? How do we read culture from the visual? Is culture or the social readable or not? DPLL

ANTH 1300. Anthropology of Addictions and Recovery.
The purpose of this course is to consider the uses and misuses of alcohol, tobacco and drugs, and approaches to recovery from addictions. We will read some of the major cross cultural, ethnographic, linguistic, and social-political works on addictions. Students will have the opportunity to conduct their own anthropological interviews regarding substance misuse and recovery as well as observe a local 12 step recovery meeting. Enrollment limited to 20. WRIT

ANTH 1310. International Health: Anthropological Perspectives.
This upper-level medical anthropology course focuses on the social and cultural complexity of health problems in developing nations, employing anthropological approaches to public health. International health issues such as HIV/AIDS, malaria, tuberculosis, leprosy, reproductive health, violence, and mental illness will be examined. The historical, political and socio-cultural dimensions of international health problems will be explored through reading ethnographic case studies. DPLL

ANTH 1345. Anthropology of the Himalayas.
This course critically examines the Himalayas, drawing on anthropological studies from Afghanistan to Northeast India. Despite the region's rugged terrain, Himalayan peoples have long been linked through trade and migration. The Himalayas are sites of Hindu and Buddhist legend. Today, however, they are beset by environmental degradation and disaster. Long the object of romantic representations, people in the Himalayas struggle to find work and make ends meet. This course brings these themes together to examine the political, economic, environmental, religious, sensory, and affective aspects of everyday life in the Himalayas.

ANTH 1623. Archaeology of Death.
Examines death, burial, and memorials using comparative archaeological evidence from prehistory and historical periods. The course asks: What insight does burial give us about the human condition? How do human remains illuminate the lives of people in the past? What can mortuary artifacts tell us about personal identities and social relations? What do grave stones and monuments reveal about beliefs and motions? Current cultural and legal challenges to the excavation and study of the dead are also considered. DPLL

ANTH 1650. Ancient Maya Writing.
Nature and content of Mayan hieroglyphic writing, from 100 to 1600 CE. Methods of decipherment, introduction to textual study, and application to interpretations of Mayan language, imagery, world view, and society. Literacy and Mesoamerican background of script.
ANTH 1820. Lost Languages: The Decipherment and Study of Ancient Writing Systems.
Humans make many marks, but it is writing that records, in tangible form, the sounds and meanings of language. Creating scripts is momentous; writing facilitates complex society and is a crucial means of cultural expression. This course addresses the nature of writing in past times. Topics include: the technology of script; its precursors and parallel notations; its emergence, use, and "death"; its change over time; especially in moments of cultural contact and colonialism; writing as a physical object or thing; code-breaking and decipherment, including scripts not yet deciphered; and the nature of non-writing or pseudo- or crypto-scripts.
Spr ANTH1820 S01 25328 TTh 1:00-2:20(10) (S. Houston)

Looks at the way anthropological methods and theories have interlaced through history to understand the dominant concerns in present-day anthropology. What were the important issues that influenced the discipline's history? Who were the significant, and not so well known, historic personalities who shaped anthropological practice and gave it its identity? Enrollment limited to 20.
Fall ANTH1900 S01 16723 W 3:00-5:30(17) (W. Simmons)

ANTH 1910D. Faces of Culture.
The seminar is designed to allow you as anthropology majors to question to debate and examine some of the assumptions of the discipline, and critically explore the multifaceted uses of the concept. We will contextualize the study of culture with the history of anthropology and across other disciplines in the humanities and the social sciences. Limited to 20. Prerequisite: ANTH1900
Fall ANTH1910CS01 16645 Th 4:00-6:30(04) (L. Fruzzetti)

ANTH 1940. Ethnographic Research Methods.
To understand the different theoretical assumptions that shape research efforts; to examine how hypotheses and research questions are formulated; and to appreciate the ethical and scientific dimensions of research by hands-on experience in fieldwork projects. Prerequisite: One Anthropology course. WRIT
Spr ANTH1940 S01 24675 T 4:00-6:30(16) (L. Fruzzetti)

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

A seminar investigating some themes in the history of anthropological theory. Starting with the delineations of the scope and nature of social science by Marx, Durkheim, and Weber, the seminar then considers various explorations of the concepts of structure, function, and agency, concluding with Bourdieu's reformulation of social anthropology for a new generation in the form of practice theory.
Fall ANTH2000 S01 15878 W 3:00-5:30(17) (D. Kertzer)

A seminar exploring fundamental theoretical and ethnographic currents in 20th- and 21st-century cultural anthropology.
Spr ANTH2010 S01 24689 Th 4:00-6:30(17) (M. Gutmann)

A seminar on the methodological problems associated with field research in social and cultural anthropology. Designed to help students prepare for both summer and dissertation research.
Spr ANTH2020 S01 24674 W 9:30-12:00 (S. Besky)

ANTH 2060. Anthropology Dissertators' Seminar.
This seminar is for post-field graduate students in residence at Brown who are at any stage of writing their dissertations. It is intended to support dissertators by providing a structured community, providing a setting for sharing goals, and workshops writing.
Fall ANTH2060 S01 16689 Arranged (D. Smith)
Spr ANTH2060 S01 25330 Arranged (D. Smith)

ANTH 2230. Medical Anthropology.
This graduate seminar provides a theoretical, methodological, and ethnographic foundation in medical anthropology. The focus will be on sociocultural approaches to the study of the suffering, illness and the body, though the course will also engage with key issues in biocultural approaches to understanding disease processes. Topics will include: social suffering, religion and medicine, local biologies, gender and the body, biotechnology, bioethics, caregiving and doctoring, and the global burden of disease.
Spr ANTH2230 S01 25329 Th 9:00-11:30 (K. Mason)

ANTH 2320. Ideology of Development.
An examination of different development theories and their relationship to field application. The analysis of project preparation and implementation is used to question the goals and objectives of Western and indigenous notions of progress and change within a social and economic context. Third World countries are utilized as case studies to address related issues, such as the meaning of development.
Spr ANTH2320 S01 24676 M 3:00-5:30(13) (L. Fruzzetti)

ANTH 2450. Exchange Scholar Program.
Fall ANTH2450 S01 14942 Arranged 'To Be Arranged'
Spr ANTH2450 S01 23976 Arranged 'To Be Arranged'

ANTH 2501. Principles of Archaeology.
Examines theoretical and methodological issues in anthropological archaeology. Attention is given to past concerns, current debates, and future directions of archaeology in the social sciences.
Fall ANTH2501 S01 15880 F 9:00-11:30 (R. Preucel)

ANTH 2800. Linguistic Theory and Practice.
An introduction to theoretical and methodological issues in the study of language and social life. We begin by examining semiotic approaches to language. We turn to classical research on language as a structured system - covering such topics as phonology and grammatical categories - but we focus on the implications of such work for broader social scientific and humanistic research. We then consider areas of active contemporary research, including cognition and linguistic relativity, meaning and semantics, pronouns and deixis, deference and register, speech acts and performativity, interaction, verbal art and poetics, reported speech, performance, and linguistic ideology.
Spr ANTH2800 S01 25325 T 1:30-3:50 (P. Fauadree)

ANTH 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall ANTH2970 S01 14943 Arranged 'To Be Arranged'
Spr ANTH2970 S01 23977 Arranged 'To Be Arranged'

ANTH 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ANTH 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall ANTH2990 S01 14944 Arranged 'To Be Arranged'
Spr ANTH2990 S01 23978 Arranged 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
APMA 0110. What's the big deal with Data Science?  
This seminar serves as a practical introduction to the interdisciplinary field of data science. Over the course of the semester, students will be exposed to the diversity of questions that data science can address by reading current scholarly works from leading researchers. Through hands-on labs and experiences, students will gain facility with computational and visualization techniques for uncovering meaning from large numerical and text-based data sets. Ultimately, students will gain fluency with data science vocabulary and ideas. There are no prerequisites for this course.

FYS WRIT
Fall APMA0110 S01 16032 TTh 9:00-10:20(08) (K. Kinnaird)

For students in any discipline that may involve numerical computations. Includes instruction for programming in MATLAB. Applications discussed include solution of linear equations (with vectors and matrices) and nonlinear equations (by bisection, iteration, and Newton’s method), interpolation, and curve-fitting, difference equations, iterated maps, numerical differentiation and integration, and differential equations. Prerequisite: MATH 0100 or its equivalent.

Spr APMA0160 S01 24766 MWF 9:00-9:50(02) (G. Fu)

APMA 0330. Methods of Applied Mathematics I, II.
This course will cover mathematical techniques involving ordinary differential equations used in the analysis of physical, biological, and economic phenomena. The course emphasizes established methods and their applications rather than rigorous foundation. Topics include: first and second order differential equations, an introduction to numerical methods, series solutions, and Laplace transformations. Prerequisite: MATH 0100, 0170, 0180, 0190, 0200, or 0350, or advanced placement.

Fall APMA0330 S01 16026 MWF 12:00-12:50(12) (V. Dobrushkin)
Spr APMA0330 S01 24796 MWF 12:00-12:50(05) ‘To Be Arranged’

APMA 0340. Methods of Applied Mathematics I, II.
Mathematical techniques involved in differential equations used in the analysis of physical, biological and economic phenomena. Emphasis on the use of established methods, rather than rigorous foundations. I: First and second order differential equations. II: Applications of linear algebra to systems of equations; numerical methods; nonlinear problems and stability; introduction to partial differential equations; introduction to statistics. Prerequisite: MATH 0100, 0170, 0180, 0190, 0200, or 0350, or advanced placement.

Fall APMA0340 S01 16030 MWF 12:00-12:50(12) (Y. Guo)
Spr APMA0340 S01 24783 MWF 12:00-12:50(05) (V. Dobrushkin)

This course gives a comprehensive introduction to the qualitative and quantitative theory of ordinary differential equations and their applications. Specific topics covered in the course are applications of differential equations in biology, chemistry, economics, and physics; integrating factors and separable equations; techniques for solving linear systems of differential equations; numerical approaches to solving differential equations; phase-plane analysis of planar nonlinear systems; rigorous theoretical foundations of differential equations.

Format: Six hours of lectures, and two hours of recitation.
Prerequisites: MATH 0100, MATH 0170, MATH 0180, MATH 0190, MATH 0200, MATH 0350 or advanced placement. MATH 0520 (can be taken concurrently).

Fall APMA0350 S01 16038 MWF 2:00-2:50(07) ‘To Be Arranged’
Spr APMA0350 S01 24793 MWF 1:00-1:50(06) (B. Kunsberg)

Covers the same material as APMA 0340, albeit of greater depth. Intended primarily for students who desire a rigorous development of the mathematical foundations of the methods used, for those students considering one of the applied mathematics concentrations, and for all students in the sciences who will be taking advanced courses in applied mathematics, mathematics, physics, engineering, etc. Three hours lecture and one hour recitation. Prerequisite: MATH 0100, 0170, 0180, 0190, 0200, or 0350, or advanced placement.

Fall APMA0360 S01 16036 MWF 1:00-1:50(06) (M. Maxey)
Spr APMA0360 S01 24782 TTh 10:30-11:50(09) (J. Darbon)

APMA 0650. Essential Statistics.
A first course in probability and statistics emphasizing statistical reasoning and basic concepts. Topics include visual and numerical summaries of data, representative and non-representative samples, elementary discrete probability theory, the normal distribution, sampling variability, elementary statistical inference, measures of association, Examples and applications from the popular press and the life, social and physical sciences. No prerequisites.

Spr APMA0650 S01 24792 TTh 9:00-10:20(01) (K. Kinnaird)

APMA 1070. Quantitative Models of Biological Systems.
Quantitative dynamic models help understand problems in biology and there has been rapid progress in recent years. The course provides an introduction to the concepts and techniques, with applications to population dynamics, infectious diseases, enzyme kinetics, aspects of cellular biology. Additional topics covered will vary. Mathematical techniques will be discussed as they arise in the context of biological problems. Prerequisites: APMA 0330, 0340 or 0350, 0360, or written permission.

Fall APMA1070 S01 16024 MWF 11:00-11:50(16) (L. Bienenstock)

APMA 1080. Inference in Genomics and Molecular Biology.
Sequencing of genomes has generated a massive quantity of fundamental biological data. Drawing traditional and Bayesian statistical inferences from these data, including: motif finding; hidden Markov models; other probabilistic models, significances in high dimensions; and functional genomics. Emphasis - application of probability theory to inferences on data sequence, the goal of enabling students to construct prob models. Statistical topics: Bayesian inferences, estimation, hypothesis testing and false discovery rates, statistical decision theory. Enroll in 2080 for more in depth coverage of the class. Prerequisite: APMA 1650, 1655 or MATH 1610 or CSC1 1450, BIOL 0200 recommended, programming skills required.

Fall APMA1080 S01 16034 TTh 9:00-10:20(08) (C. Lawrence)

APMA 1170. Introduction to Computational Linear Algebra.
Focuses on fundamental algorithms in computational linear algebra with relevance to all science concentrators. Basic linear algebra and matrix decompositions (Cholesky, LU, QR, etc.), round-off errors and numerical analysis of errors and convergence. Iterative methods and conjugate gradient techniques. Computation of eigenvalues and eigenvectors, and an introduction to least squares methods.

Fall APMA1170 S01 16027 MWF 10:00-10:50(14) (G. Fu)
Basic probabilistic problems and methods in operations research and
management science. Methods of problem formulation and solution.
Markov chains, birth-death processes, stochastic service and queueing
systems, the theory of sequential decisions under uncertainty, dynamic
programming. Applications. Prerequisite: APMA 1650, 1655 or MATH
1610, or equivalent.
Spr APMA1200 S01 24797 TTh 1:00-2:20(10) (K. Ramanan)

An introduction to the basic mathematical ideas and computational
methods of optimizing allocation of effort or resources, with or without
constraints. Linear programming, network models, dynamic programming,
and integer programming.
Fall APMA1210 S01 16040 TTh 10:30-11:50(13) (B. Rozovsky)

APMA 1330. Applied Partial Differential Equations II.
Mathematical methods based on functions of a complex variable.
Fourier series and its applications to the solution of one-dimensional
heat conduction equations and vibrating strings. Series solution and
special functions. Vibrating membrane. Sturm-Liouville problem and
eigenfunction expansions. Fourier transform and wave propagations.
Fall APMA1330 S01 16041 MWF 1:00-1:50(06) (D. Sanz-Alonso)

APMA 1360. Topics in Chaotic Dynamics.
This course gives an overview of the theory and applications of dynamical
systems modeled by differential equations and maps. We will discuss
changes of the dynamics when parameters are varied, investigate periodic
and homoclinic solutions that arise in applications, and study the impact
of additional structures such as time reversibility and conserved quantities
on the dynamics. We will also study systems with complicated "chaotic"
dynamics that possess attracting sets which do not have an integer
dimension. Applications to chemical reactions, climate, epidemiology, and
phase transitions will be discussed. This course can be used as a senior
seminar. WRIT
Spr APMA1360 S01 24794 MWF 2:00-2:50(07) (J. Mallet-Paret)

APMA 1560. Statistical Inference I.
APMA 1650 is an integrated first course in mathematical statistics.
The first half of APMA 1650 covers probability and the last half is statistics,
integrated with its probabilistic foundation. Specific topics include
probability spaces, discrete and continuous random variables, methods for
parameter estimation, confidence intervals, and hypothesis testing.
Prerequisite: One year of university-level calculus. At Brown, this
corresponds to MATH 0100, MATH 0170, MATH 0180, MATH 0190, MATH
0200, or MATH 0350. A score of 4 or 5 on the AP Calculus BC exam is also
sufficient.
Fall APMA1560 S01 16033 TTh 1:00-2:20(10) (B. Kunsberg)
Spr APMA1650 S01 24798 MWF 11:00-11:50(04) (D. Sanz-Alonso)

APMA 1655. Statistical Inference II.
Students may opt to enroll in 1655 for more in depth coverage of APMA
1650. Enrollment in 1655 will include an optional recitation section and
required additional individual work. Applied Math concentrators are
encouraged to take 1655.
Prerequisite (for either version): MATH 0100, 0170, 0180, 0190, 0200, or
0350.
Fall APMA1655 S01 16042 MWF 11:00-11:50(16) (H. Wang)

APMA 1660. Statistical Inference II.
APMA 1660 is designed as a sequel to APMA 1650 to form one of the
alternative tracks for an integrated year's course in mathematical
statistics. The main topic is linear models in statistics. Specific topics
include likelihood-ratio tests, nonparametric tests, introduction to statistical
computing, matrix approach to simple-linear and multiple regression,
analysis of variance, and design of experiments. Prerequisite: APMA
1650, 1655 or equivalent, basic linear algebra.
Spr APMA1660 S01 24787 TTh 2:30-3:50(11) (B. Gidas)

Examination of probability theory and mathematical statistics from
the perspective of computing. Topics selected from random number
generation, Monte Carlo methods, limit theorems, stochastic dependence,
Bayesian networks, dimensionality reduction. Prerequisites: A calculus-
based course in probability or statistics (e.g. APMA1650 or MATH1610) is
required, and some programming experience is strongly recommended.
Prerequisite: MATH 0100, 0170, 0180, 0190, 0200, or 0350, or equivalent
placement.
Fall APMA1690 S01 16028 MWF 2:00-2:50(07) (N. Garcia Trillos)

APMA 1710. Information Theory.
Information theory is the study of the fundamental limits of information
transmission and storage. This course, intended primarily for advanced
undergraduates and beginning graduate students, offers a broad
introduction to information theory and its applications: Entropy and
information, lossless data compression, communication in the presence of
noise, channel capacity, channel coding, source-channel separation, lossy
data compression. Prerequisite: one course in probability.
Fall APMA1710 S01 16037 MWF 9:00-9:50(01) (G. Menon)

APMA 1740. Recent Applications of Probability and Statistics.
This course develops the mathematical foundations of modern
applications of statistics to the computational, cognitive, engineering,
and neural sciences. The course is rigorous, but the emphasis is on
application. Topics include: Gibbs ensembles and their relation to
maximum entropy, large deviations, exponential models, and information
theory; statistical estimation and the generative, discriminative and
algorithmic approaches to classification; graphical models, dynamic
programming, MCMC computing, parameter estimation, and the EM
algorithm. For 2,000-level credit enroll in 2610; for 1,000-level credit enroll
in 1740. Rigorous calculus-based statistics, programming experience, and
strong mathematical background are essential. For 2610, some graduate
level analysis is strongly suggested.
Fall APMA1740 S01 24789 MWF 11:00-11:50(04) (G. Garcia Trillos)

APMA 1930S. Approximations for Piecewise Smooth Functions.
We will discuss approximation methods for piecewise smooth functions
with isolated discontinuities. Such piecewise smooth functions appear
often in applications, most notably in computational fluid dynamics of
high speed flows. The basic background required is APMA 0330-0340,
and some knowledge of programming (e.g. MATLAB or FORTRAN or C).
APMA 1170 and/or APMA 1180 are helpful but not required. Students
will be asked to participate actively in the class, and perform individual
or group projects which may be designed to fit the interest of each student
or group.
Fall APMA1930S S01 16056 M 3:00-5:30(15) (C. Shu)

APMA 1970. Independent Study
Section numbers vary by instructor. Please check Banner for the correct
section number and CRN to use when registering for this course.

Basic theory of ordinary differential equations, flows, and maps.
Two-dimensional systems. Linear systems. Hamiltonian and integrable
systems. Lyapunov functions and stability. Invariant manifolds, including
stable, unstable, and center manifolds. Bifurcation theory and normal
forms. Nonlinear oscillations and the method of averaging. Chaotic motion,
including horseshoe maps and the Melnikov method. Applications to
the physical and biological sciences.
Fall APMA2190 S01 16035 TTh 2:30-3:50(03) (A. Matzavinos)

APMA 2200. Nonlinear Dynamical Systems: Theory and Applications
Basic theory of ordinary differential equations, flows, and maps.
Two-dimensional systems. Linear systems. Hamiltonian and integrable
systems. Lyapunov functions and stability. Invariant manifolds, including
stable, unstable, and center manifolds. Bifurcation theory and normal
forms. Nonlinear oscillations and the method of averaging. Chaotic motion,
including horseshoe maps and the Melnikov method. Applications in the
physical and biological sciences.
Spr APMA2200 S01 24795 TTh 2:30-3:50(11) (A. Matzavinos)
The theory of the classical partial differential equations, as well as the method of characteristics and general first order theory. Basic analytic tools include the Fourier transform, the theory of distributions, Sobolev spaces, and techniques of harmonic and functional analysis. More general linear and nonlinear elliptic, hyperbolic, and parabolic equations and properties of their solutions, with examples drawn from physics, differential geometry, and the applied sciences. Generally, semester II of this course concentrates in depth on several special topics chosen by the instructor.
Fall APMA2230 S01 16025 TTh 10:30-11:50(13) (C. Dafermos)

The theory of the classical partial differential equations, as well as the method of characteristics and general first order theory. Basic analytic tools include the Fourier transform, the theory of distributions, Sobolev spaces, and techniques of harmonic and functional analysis. More general linear and nonlinear elliptic, hyperbolic, and parabolic equations and properties of their solutions, with examples drawn from physics, differential geometry, and the applied sciences. Generally, semester II of this course concentrates in depth on several special topics chosen by the instructor.
Spr APMA2240 S01 24784 MWF 10:00-10:50(03) (H. Dong)

APMA 2450. Exchange Scholar Program.
Fall APMA2450 S01 14945 Arranged "To Be Arranged"

Finite difference methods for solving time-dependent initial value problems of partial differential equations. Fundamental concepts of consistency, accuracy, stability and convergence of finite difference methods will be covered. Associated well-posedness theory for linear time-dependent PDEs will also be covered. Some knowledge of computer programming expected.
Fall APMA2550 S01 16031 W 3:00-5:30(17) (G. Kidiadakis)

APMA 2560. Numerical Solution of Partial Differential Equations II.
An introduction to weighted residual methods, specifically spectral, finite element and spectral element methods. Topics include a review of variational calculus, the Rayleigh-Ritz method, approximation properties of spectral and finite element methods, and solution techniques. Homework will include both theoretical and computational problems.
Spr APMA2560 S01 24790 TTh 10:30-11:50(09) (G. Kidiadakis)

APMA 2570B. Numerical Solution of Partial Differential Equations III.
We will cover finite element methods for ordinary differential equations and for elliptic, parabolic and hyperbolic partial differential equations. Algorithm development, analysis, and computer implementation issues will be addressed. In particular, we will discuss in depth the discontinuous Galerkin finite element method. Prerequisite: APMA 2550 or equivalent knowledge in numerical methods.
Fall APMA2570BES01 16023 M 3:00-5:30(15) (M. Ainsworth)

APMA 2580B. Computational Fluid Dynamics.
An introduction to computational fluid dynamics with emphasis on compressible flows. We will cover finite difference, finite volume and finite element methods for compressible Euler and Navier-Stokes equations and for general hyperbolic conservation laws. Background material in hyperbolic partial differential equations will also be covered. Algorithm development, analysis, implementation and application issues will be addressed. Prerequisite: APMA 2550 or equivalent knowledge in numerical methods.
Spr APMA2580BES01 24799 M 3:00-5:30(13) (C. Shu)

APMA 2610. Recent Applications of Probability and Statistics.
This course develops the mathematical foundations of modern applications of statistics to the computational, cognitive, engineering, and neural sciences. The course is rigorous, but the emphasis is on application. Topics include: Gibbs ensembles and their relation to maximum entropy, large deviations, exponential models, and information theory; statistical estimation and the generative, discriminative and algorithmic approaches to classification; graphical models, dynamic programming, MCMC computing, parameter estimation, and the EM algorithm. For 2,000-level credit enroll in 2610; for 1,000-level credit enroll in 1740. Rigorous calculus-based statistics, programming experience, and strong mathematical background are essential. For 2610, some graduate level analysis is strongly suggested.
Spr APMA2610 S01 24788 MWF 11:00-11:50(04) (N. Garcia Trillos)

A one-semester course that provides an introduction to probability theory based on measure theory. The course covers the following topics: probability spaces, random variables and measurable functions, independence and infinite product spaces, expectation and conditional expectation, weak convergence of measures, laws of large numbers and the Central Limit Theorem, discrete time martingale theory and applications.
Fall APMA2630 S01 16039 TTh 1:00-2:20(10) (K. Ramanan)

A one-semester course in probability that provides an introduction to stochastic processes. The course covers the following subjects: Markov chains, Poisson process, birth and death processes, continuous-time martingales, optional sampling theorem, martingale convergence theorem, Brownian motion, introduction to stochastic calculus and Ito's formula, stochastic differential equations, the Feynman-Kac formula, Girsanov's theorem, the Black-Scholes formula, basics of Gaussian and stationary processes. Prerequisite: APMA 2630 or equivalent course.
Spr APMA2640 S01 24785 TTh 1:00-2:20(10) (P. Dupuis)

APMA 2670. Mathematical Statistics I.
This course presents advanced statistical inference methods. Topics include: foundations of statistical inference and comparison of classical, Bayesian, and minimax approaches, point and set estimation, hypothesis testing, linear regression, linear classical and principal component analysis, MRF, consistency and asymptotic normality of Maximum Likelihood and estimators, statistical inference from noisy or degraded data, and computational methods (E-M Algorithm, Markov Chain Monte Carlo, Bootstrap). Prerequisite: APMA 2630 or equivalent.
Fall APMA2670 S01 16029 Th 4:00-6:30(04) (G. Gidas)

APMA 2810U. Topics in Differential Equations.
No description available.
Fall APMA2810U S01 16052 MWF 10:00-10:50(14) (J. Guzman)

APMA 2820H. Kinetic Theory.
We will focus on two main topics in mathematical study of the kinetic theory: (1) The new goal method to study the trend to Maxwellians; (2) various hydrodynamical (fluids) limits to Euler and Navier-Stokes equations. Main emphasis will be on the ideas behind proofs, but not on technical details.
Spr APMA2820H S01 24803 Th 4:00-6:30(17) (M. Ainsworth)

APMA 2980. Research in Applied Mathematics.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

APMA 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall APMA2990 S01 14947 Arranged "To Be Arranged"
Spr APMA2990 S01 23980 Arranged "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ARCH 0100. Field Archaeology in the Ancient World.
Always wanted to be Indiana Jones? This course, focusing on the Mediterranean world and its neighbors in antiquity, interprets field archaeology in its broadest sense. In addition to exploring "how to do" archaeology - the techniques of locating, retrieving, and analyzing ancient remains - we will consider how the nature of these methodologies affects our understanding of the past.

Fall ARCH0100 S01 16459 MWF 10:00-10:50(14) (L. Bestock)

ARCH 0201. Sport in the Ancient Greek World (CLAS 02100).
Interested students must register for CLAS 02100.

Fall ARCH0201 S01 16818 Arranged "To Be Arranged"

ARCH 0270. Troy Rocks! Archaeology of an Epic.
What do Brad Pitt, Julius Caesar, Dante, Alexander the Great, and countless sports teams have in common? The Trojan War! This course will explore the Trojan War not only through the archaeology, art, and mythology of the Greeks and Romans but also through the popular imaginings of cultures ever since, to figure out what "really" happened when Helen ran off and Achilles got angry and the Greeks came bearing gifts. Enrollment limited to 20 first year students. FYS.

Fall ARCH0270 S01 16462 TTh 9:00-10:20(08) "To Be Arranged"

ARCH 0303. tiny: Miniature Might and Meaning.
Egyptian pyramids, Roman aqueducts, Easter Island heads—colossal artifacts are immediately recognizable as embodiments of power. The diminutive—though less theorized among archaeologists, anthropologists, and art historians—is just as potent and alluring. Even across vast stretches of space and time, tiny things enchant and incite wonder. A microscopic Bible, a Renaissance micro-mosaic, a sculpture of hell complete with sinners carved out of a human tooth. This course is a cross-cultural exploration of the power of the miniature, the undersized, the teeny-weeny.

Spr ARCH0303 S01 25488 TTh 10:30-11:50(09) (F. Rojas Silva)

This course is about the Mediterranean Iron Age. It examines indigenous communities of the first millennium BC in order to assess critically conventional and often stereotypical representations of Iron Age societies. Themes to be explored include the ever increasing social complexity of chiefdoms and states, princessly burials and warriors, and urban settlements and monumental architecture that allegedly mark the transition from 'civilization' from East to West.

Fall ARCH0415 S01 16710 MWF 11:00-11:50(16) (P. Van Dommelen)

ARCH 0730. The Secrets of Ancient Bones: Discovering Ancient DNA.
New analyses of ancient DNA preserved for millennia in bones and soils have revolutionized the field of archaeology. Suddenly, archaeologists have gained new insight into human origins and migrations, diseases, agriculture, and even the slave trade. Recent genetic case studies will provide a lens for learning about the archaeology of diverse world regions and time periods, from Oceania to Mesoamerica and from the Paleolithic through recent history. Topics will include: genetic relationships between humans, Neanderthals, and Denisovans; the peopling of the globe; diaporas; extinction and de-extinction; and plant and animal domestication.

Fall ARCH0730 S01 16836 MWF 1:00-1:50(06) (K. Brunson)

ARCH 1150. Cities and Urban Space in the Ancient World.
This course investigates ancient cities from a comparative perspective. Using contemporary approaches to cities and the production of urban space, we will explore side-by-side cities of the ancient Near Eastern and Mediterranean world, with comparisons drawn as well from other regions such as Mesoamerica. We will investigate how cities were planned in the past and their monumental architecture shaped, with a special focus on Egyptian case studies such as the productive prehistoric site of Tell el-Dab'a.

WRIT Fall ARCH1150 S01 16863 TTh 10:30-11:50(13) (M. Andrews)

ARCH 1175. Archaeology Matters! Past Perspectives on Modern Problems.
This is not the first era to face many of today's global problems - rising temperatures, sea-level change, sustainability, pollution, fire, water scarcity, urban blight, social violence, and more. Archaeology is more than the understanding of peoples long ago and far away, but a discipline whose long-term perspective could offer potential solutions to current crises. Through case studies and discussion of key issues, this class asks how archaeology - and archaeologists - might just change the world.

WRIT Spr ARCH1175 S01 25113 TTh 2:30-3:50(11) (J. Cherry)

ARCH 1621. History of Egypt I (EGYT 1430).
Interested students must register for EGYT 1430.

Fall ARCH1621 S01 16819 Arranged "To Be Arranged"

ARCH 1630. Fighting Pharaohs: Ancient Egyptian Warfare.
When and why did the ancient Egyptians engage in war? Who was fighting? What were their weapons like and what were their military strategies? What were the political situations that caused them to go to war? How did warfare impact Egyptian society? In studying Egyptian history and society through the pervasive motif of war, we will gain an understanding of the forces that shaped Egyptian culture. Enrollment limited to 55.

Spr ARCH1630 S01 25112 TTh 1:00-2:20(10) (L. Bestock)

ARCH 1900. The Archaeology of College Hill.
A training class in field and laboratory techniques. Topics include the nature of field archaeology, excavation and survey methodologies, archaeological ethics, computer technologies (such as GIS), and site and artifact analysis and conservation. Students will act as practicing archaeologists through the investigation of local historical and archaeological sites in the College Hill area (e.g. the First Baptist Church of America and Brown University's Quiet Green). Prerequisite: A previous course in Archaeology and the Ancient World or Anthropology is required. Restricted to sophomores, juniors, and seniors, except by permission of the instructor. Enrollment limited to 15.

Fall ARCH1900 S01 16460 M 3:00-5:30(15) "To Be Arranged"

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Honors students in Archaeology and the Ancient World who are completing their theses should enroll in this course in their final semester. The subject of the thesis and program of study will be determined by the needs of the individual student. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Interested students must register for ANTH 2501.

Fall ARCH2006 S01 16620 Arranged "To Be Arranged"

ARCH 2010B. Approaches to Archaeological Survey in the Old World.
Recent decades have witnessed a marked development of interest in regional approaches to the ancient world and its landscapes. This seminar will explore the history of this development, as well as survey's impact on the work of both ancient historians and archaeologists. Topics to be covered include survey design and methodology, and the wider implications and lessons of regional analysis.

Fall ARCH2010B S01 16463 Th 4:00-6:30(04) (J. Cherry)
Writing systems abounded in the ancient Mediterranean: Egyptian hieroglyphs, Mesopotamian cuneiform, and the linear scripts of the Aegean are only a few of dozens of systems that people in the region have used to record language over millennia. Who wrote first and why? What “killed” hieroglyphs and cuneiform? What happens when a literate culture comes into contact with another without writing? Why do these questions matter now that the alphabet seems to reign supreme?
Spr ARCH2115 S01 25344 W 3:00-5:30(14) (F. Rojas Silva)

How did the Greeks and Romans perceive and discuss the beautiful and the ugly? The fragrant or malodorous? The ticklish and the tart? These may seem like difficult questions, even bizarre, and yet, in many ways, those past opinions inform our own experience of the world. This course is an exploration, through archaeological and literary primary sources, of the many ways in which ancient men and women interacted through their senses with the world around them and how they reflected upon that interaction.
Fall ARCH2185 S01 16711 M 3:00-5:30(15) (Y. Hamilakis)

ARCH 2725. The Making of Egypt.
In the late 4th millennium, a state and culture recognizably pharaonic in structures rose in the Nile Valley. How was Egypt made, and how can we study the process? This seminar will examine this exceptional confluence of the development of monumental architecture, writing, canonical art, and kingship during Egypt’s formative centuries from c. 3200-2600 BC. We will study the rapid changes at the start of the First Dynasty in the context of state formation over the longer span of late-Predynastic to Old Kingdom Egypt.
Spr ARCH2725 S01 25345 Th 4:00-6:30(17) (L. Bestock)

ARCH 2980. Individual Reading.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ARCH 2981. Thesis Research.
Individual reading for the Master's degree. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ARCH 2982. Individual Reading for Dissertation.
Reading leading to selection of the dissertation subject. Single credit. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ARCH 2983. Dissertation Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ARCH 2990. Thesis Preparation.
For graduate students who are preparing a thesis and who have met the tuition requirement and are paying a registration fee to continue active enrollment.

Biology and Medicine

Biology

Introduces the basic principles of human nutrition, and the application of these principles to the specific needs of humans, and the role of nutrition in chronic diseases. Provides an overview of the nutrients and their use by the human body. Also examines the role of nutrients in specific functions and disease states of the body. Not for biology concentration credit.
Enrollment limited to 100.
Fall BIOL0030 S01 15551 MW 8:30-9:50(01) (M. Flynn)

BIOL 0040. Nutrition for Fitness and Physical Activity.
Reviews the role of nutrition in physical activity and health. It is designed to provide the student with the information and skills needed to translate nutrition and physical activity recommendations into guidelines for both the athlete for maximal performance and the non-athlete to improve both health and body weight. Students will learn the use of the energy yielding nutrition in physical activity and how food choices can influence both athletic performance and long-term health through the effect on risk factors for chronic diseases. Prerequisite: BIOL 0030. Enrollment limited to 20.
Instructor permission required.
Spr BIOL0040 S01 24465 T 4:00-6:30(16) (M. Flynn)

BIOL 0080. Biotechnology Management.
An examination of the pharmaceutical, biotechnology, and medical product industries: what they are, how they function, whence they originate, and various perspectives on why some succeed and others fail. Pathways from lab-bench to marketplace are described as are the pervasive influences of the FDA, patent office, and courts. Extensive reading; emphasis on oral presentation. Primarily intended for students planning a career in biomedical industry. Not for biology concentration credit. Students MUST register for the lecture section and the conference. Enrollment limited to 20.
Spr BIOL0080 S01 25354 T 4:00-6:30(16) (B. Bready)

BIOL 0100. Living Biology at Brown and Beyond.
This unique course has three goals: 1) provide students meaningful introductions to the people, places, projects and opportunities that comprise the Program in Biology at Brown, 2) foster student identities as valued members of our STEM community while helping each discover their unique interests and potential contributions, 3) arm students with a diversity of personal, professional and academic skills that will help them succeed in Biology at Brown and beyond. The course is especially tailored to those likely to pursue one of Brown’s many Biology concentrations, but it is open to all. Limited to 200 First Year students, mandatory S/NC.
Fall BIOL0100 S01 16790 M 3:00-5:30(15) (K. Smith)

BIOL 0140C. Communicating Science: Animating Science.
Taught by RISD/Brown professors with the Science Ctr and Creative Mind Initiative, this course explores the pedagogy of using visual media to convey scientific concepts. The goal is to assess the quality of existing material and design new material that fill an educational need and makes science engaging and accessible. Lectures, labs, discussions, critiques and speakers. Teams collaborate on a series of short exercises leading to the creation of videos/animations explaining scientific concepts. Projects evaluated on accuracy, clarity of explanation, educational value, viewer engagement and creativity. Not for concentration credit in Biological Sciences programs. Enrollment limited to 12; instructor permission.
Fall BIOL0140C S01 15554 W 1:00-6:00 (J. Stein)

BIOL 0150A. Techniques and Analyses using DNA-Based Biotechnology.
Students will study and practice a range of methods used in molecular biology while examining the ways in which those tools are used in research and in the development of medical treatments. This experience, combined with the reading and discussion of selected papers from the primary literature, fosters development of a skill set critically important for the modern day biology student. Expected background: high school Biology course. Enrollment limited to 10 first year students. Instructor permission required. Half-credit course. S/N, FYS
Fall BIOL0150A S01 16188 T 5:00-8:00PM (J. Hall)

BIOL 0150C. Methods for Extraction and Analyzing Secondary Metabolites of Medicinal Plants.
Plant secondary metabolites are currently the subject of much research interest when investigating new target compounds for potential medicine from natural products. New leads for drugs and phytotherapeutics from plants and plant parts have been increasing at a rapid rate especially by the pharmaceutical industry. Many plants have been selected and collected for their specific secondary compounds and healing powers by ethnobotanists in the field. The final step is the extraction, analyzing and identification of these plant specimens. Enrollment limited to 10 first year students. Instructor permission required. Half-credit course. S/N, FYS
Spr BIOL0150C S01 25393 T 3:00-5:00 (F. Jackson)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
BIOL 0150D. Techniques in Regenerative Medicine: Cells, Scaffolds and Staining.
Regenerative Medicine, also known as Tissue Engineering, is the process of creating living, functional tissues to replace or repair native tissue or organ functions that have been lost due to disease or congenital defects. As such, it is a prominent scientific discipline that can either "stand alone" or complement material-based research efforts in the areas of device design, drug delivery, diagnostics and pharmaceuticals. Students will develop proficiencies in basic cell culture techniques, early stage tissue regeneration strategies and histochemical characterization of mammalian cell constructs. Enrollment limited to 10 first year students. Instructor permission required. Half-credit course. S/NC. FYS
Fall BIOL0150D S01 16044 Arranged "To Be Arranged"

BIOL 0170. Biotechnology in Medicine.
Introduces undergraduates to the main technological advances currently dominating the practice of medicine. Provides an overview of the objectives, techniques, and problems related to the application of biomedical technology to the diagnosis and treatment of disease and the contemporary health care industry. Topics include: pharmaceutical development and formulation; organ replacement by prosthesis and transplantation; medical imaging; tissue engineering, therapeutic cloning, regenerative medicine; stem cells; societal, economic, and ethical issues. This course does carry Biology concentration credit.
Fall BIOL0170 S01 16046 MWF 12:00-12:50(12) "To Be Arranged" (P. Shank)

BIOL 0180. The Biology of AIDS.
AIDS represents an example of the vulnerability of humans to new infectious agents. We will review some human infectious diseases including small pox yellow fever and influenza, and then explore AIDS/ HIV. First characterized in 1981, AIDS became the leading cause of death in U.S. males aged 25-44 within a decade. We will examine what factors make HIV such a potent pathogen. The course is intended for students beginning in biology. Expected: BIOL 0200, or equivalent placement. This course does carry Biology concentration credit.
Fall BIOL0180 S01 15657 MW 8:30-9:50(01) (P. Shank)

BIOL 0190E. Botanical Roots of Modern Medicine.
This course will explore a variety of medicinal plants found throughout the world, the diverse cultures that use them in their daily lives and the scientific underpinnings of their medicinal uses. In conjunction with readings, students will gain a hands-on approach in lab, observing, identifying and growing these plants. Enrollment limited to: 20. Students MUST register for the lecture section and the lab. FYS
Fall BIOL0190E S01 16286 MW 3:00-4:20(17) (F. Jackson)

BIOL 0190F. Darwinian Medicine.
Explores evolutionary explanations of why we get sick, and how this can shape, or misshape, our interpretations of medicine. Draws on evolutionary genetics, molecular biology, development and regenerative medicine. The course will build on evolutionary biology and then focus on disease processes such as infection, aging, cancer, allergy, diabetes, and obesity. Enrollment limited to 20 first year students. FYS
Fall BIOL0190F S01 16288 TTh 1:00-2:20(10) (M. Tatar)

BIOL 0190P. Pride and Prejudice in the Development of Scientific Theories.
We will examine how the pace and shape of scientific progress is affected by the social/cultural context and the "personality" of the individual. We will look into how the interplay between society and the individual affects how scientific theories arise, are presented, are debated and are accepted. The course will initially focus on Charles Darwin and his theory of Natural Selection using the biography of Adrian Desmond and James Moore, "Darwin: The Life of a Tormented Evolutionist." Enrollment limited to 20 first year students. FYS DPLL
Fall BIOL0190P S01 16190 TTh 2:30-3:50(03) (S. Helfand)

BIOL 0190R. Phage Hunters, Part I.
A research-based lab class for freshmen; both semesters are required in the sequence. Students will isolate and characterize a bacteriophage viruses found in the soil. Lab work includes isolation and purification of your own phage, DNA isolation and restriction mapping, and EM characterization of your phage. Several phages will be selected for genome sequencing over Winter Recess, and annotated in the spring. One hour lecture, discussion, and 3 hours lab per week. Expected: AP Biology or equivalent, and HS chemistry. Instructor permission required. Admittance based on review of applications in the first class. Limited to 20 freshmen. FYS
Fall BIOL0190R S01 15658 M 3:00-5:30(15) (S. Taylor)

BIOL 0190S. Phage Hunters, Part II.
A research-based laboratory/class for freshmen; both semesters are required. Students will isolate and characterize a bacteriophage viruses found in the soil. Lab work includes isolation and purification of your own phage, DNA isolation and restriction mapping, and EM characterization of your phage. Several phages will be selected for genome sequencing over Winter Recess, and annotated in the spring. One hour of lecture/ discussion, and 3 hours lab per week. Expected: AP Biology or equivalent, HS chemistry, and permission of the instructor. Students are expected to take fall and spring courses in the sequence. Enrollment limited to 20 first-year students. Instructor permission. FYS
Spr BIOL0190S S01 24548 WF 3:00-5:30(13) (S. Taylor)

This course presents an integrated account of development, structure and function in plants, especially seed plants. Enrollment limited to 20 first year students. FYS WRT
Fall BIOL0190U S01 16191 TTh 10:30-11:50(13) (P. Heywood)

BIOL 0200. The Foundation of Living Systems.
A broad overview of biological systems, emphasizing patterns and processes that form the basis of life. Explores essentials of biochemistry, molecular, and cellular biology and their relationship to the larger issues of ecology, evolution, and development. Examines current research trends in biology and their influence on culture. Appropriate for all students interested in biology. Serves as a gateway course to much of the intermediate and advanced curriculum. Placement tests are offered. Expected: AP scores of 4 or 5 are equivalent to BIOL 0200, and place a student out of this course. Students will be assigned to a lab section during the second week of class.
Spr BIOL0200 S01 25413 MWF 11:00-11:50(04) (K. Miller)

BIOL 0210. Diversity of Life.
This course will explore biological diversity – the number of taxa, and the functions, and processes that support life – from the perspectives of ecology and evolutionary biology. It will draw on examples and case studies from the geological record, functional morphology, the evolution of organ systems in vertebrates, genomics, behavior and sexual selection in birds and invertebrates. Overarching themes will emphasize that taxonomic diversity is an emergent property of complex life on Earth, and the importance of diversity of biological functions and processes in generating and maintaining taxonomic diversity. Class Restriction: Freshmen and sophomores; others by instructor permission.
Fall BIOL0210 S01 16321 MWF 11:00-11:50(16) (J. Kellner)

BIOL 0280. Introductory Biochemistry.
Lectures and recitation sections explore the mechanisms involved in the principles of macromolecular structure and function, the organization and regulation of pathways for intermediary metabolism, and the transfer of information from genes to proteins. It is expected that students have taken CHEM 0350 or are taking it concurrently.
Spr BIOL0280 S01 25424 TTh 1:00-2:20(10) (L. Lapierre)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
BIOL 0285. Introductory Biochemistry Laboratory.
Working in small groups, students will examine enzymatic reactions in bacterial metabolic pathways. They will gather information from online databases, define a working model and test this model by purifying a target enzyme and characterizing its biochemical function. They will then propose a hypothesis for the enzymatic reaction mechanism and test this hypothesis by designing mutations in the enzyme active site and characterizing these mutant enzymes experimentally. Priority given to sophomore and junior students. Prerequisites: BIOL 0280; preference given to students concurrently enrolled. Instructor permission required. Course credit 0.5; final grade determined for BIOL 0285.
Spr BIOL0285 S01 25434 M 1:00-5:00 (S. Taylor)
Spr BIOL0285 S02 25435 Th 2:30-6:30 (S. Taylor)

BIOL 0380. The Ecology and Evolution of Infectious Disease.
Infectious diseases remain among the leading causes of death worldwide, and this burden is disproportionately borne by children living in low- and middle-income countries. Thus management of infectious disease remains a critical intellectual challenge in the 21st century. This course will develop and apply ecological and evolutionary theory to infectious microbes (and their hosts) via the detailed examination of a number of case studies. This will be accomplished by a combination of lectures, discussions, and readings drawn mainly from the primary literature. Assesment will be based on biweekly problem sets, two midterms and one final exam. Expected: BIOL 0200 or equivalent. Fall BIOL0380 S01 16326 MWF 10:00-10:50 (D. Weirich)

Many questions about the workings of living creatures can be answered by joining math, physics, and biology. We will identify basic physicial science concepts that help biologists understand the structure and function of animals, plants, and microorganisms, and use these to study how the physical world constrains and facilitates the evolution of the extraordinary design and diversity of organisms. For first and second year students; others by permission. Recommended background: BIOL 0200, or equivalent. Enrollment limited to 40. Instructor permission required. WRIT
Fall BIOL0400 S01 16362 MWF 2:00-2:50 (S. Swartz)

BIOL 0410. Invertebrate Zoology.
A survey of invertebrate animals emphasizing evolutionary patterns and ecological relationships. Functional morphology, physiology, reproduction, development, and behavior of invertebrates will be examined. Laboratory exercises and two separate day-long field trips provide firsthand experience with the animals. Expected: BIOL 0200 or equivalent. Enrollment limited to 44. Students MUST register for the lecture section and a lab.
Fall BIOL0410 S01 16363 MWF 11:00-11:50 (C. Dunn)

The principles, concepts, and controversies involved in the study of the distribution and abundance of plant and animal populations and their integration into natural communities. Emphasizes interactions among organisms and the hierarchical nature of ecological processes affecting individuals, populations, and communities. Expected: BIOL 0200 (or equivalent) and MATH 0090. Lectures and weekly discussion.
Spr BIOL0420 S01 25400 Th 9:00-10:20 (J. Witman)

BIOL 0430. The Evolution of Plant Diversity.
Examines the evolutionary history of plants from a phylogenetic perspective. The science of phylogenetics - how to infer phylogenies and how to use them to understand organismal evolution. Highlights major trends in plant evolution over the past 400 million years. Lectures survey major plant lineages, with special focus on flowering plants. Weekly labs, field trips, and assignments stress basic plant anatomy and morphology, identification, and learning the local flora. Expected: BIOL 0200 (or equivalent placement). WRIT
Fall BIOL0430 S01 16366 TTh 9:00-10:20 (E. Edwards)

This course focuses on what plants do and how they do it. Introduces the biology of plants, their growth and development, structural features, and their cellular and organismal responses to key stimuli. Examines physiological, reproductive and developmental strategies throughout the plant life cycle and in relation to environmental challenges. During laboratory section meetings, students pursue inquiry-based research projects addressing novel questions about mechanisms that control plant growth and development. Laboratory section is required. Prerequisites: One Brown course with laboratory section in either Biology or Chemistry. Enrollment limited to 24 students.
Spr BIOL0440 S01 25436 TTh 10:30-11:50 (A. DeLong)

Will enable to students to master fundamental ecological concepts and understand how this knowledge can be used to inform coastal conservation and management. Case studies from New England and elsewhere, field trips to rocky shores, salt marshes and coastal ecosystems enable students to develop scientific skills and experience the challenges of coastal conservation science. The course is aimed at freshmen and sophomores. Expected background: BIOL 0200 or equivalent placement. Enrollment limited to 10 students, and written permission required. Email (Mark_Bertness@brown.edu) to receive course application (due May 1). Admitted students register for the course in September.
Fall BIOL0455 S01 16370 TTh 1:00-2:20 (M. Bertness)

BIOL 0470. Genetics.
Genetic phenomena at the molecular, cellular, organismal, and population levels. Topics include transmission of genes and chromosomes, mutation, structure and regulation of the expression of the genetic material, elements of genetic engineering, and evolutionary genetics. One laboratory session and one discussion session per week. (Students should not plan to take BIOL 0470 after 1540.) Expected: BIOL 0200 (or equivalent placement). Students will be assigned to Lab sections the first week of class.
Fall BIOL0470 S01 16192 TTh 10:30-11:50 (M. Johnson)

BIOL 0480. Evolutionary Biology.
A broad introduction to the patterns and processes of evolution at diverse levels of biological organization. Topics covered include natural selection, adaptation, speciation, systematics, macroevolution, mass extinction events, and human evolution. Weekly discussion sections involve debates on original research papers. Occasional problem sets involve computer exercises with population genetics and phylogeny reconstruction. Expected: BIOL 0200 (or equivalent placement).
Fall BIOL0480 S01 16373 MWF 9:00-9:50 (D. Rand)

BIOL 0495. Statistical Analysis of Biological Data.
A first course in probability distributions and the use of statistical methods for biological data. Topics covered will include describing data, statistical inference (hypothesis tests and confidence intervals), analyzing associations, and methods for categorical data (contingency tables and odds ratios). Methods will be applied to data drawn from areas of biological inquiry. For statistics or related science credit in Biology programs. Expected background: BIOL 0200 or equivalent, math equivalent to MATH 0100. This course is for related science credit only in Biological Sciences concentration programs. Enrollment limited: 40 undergraduates-20 juniors and 20 sophomores. Registration for seniors requires permission from the instructor.
Spr BIOL0495 S01 25506 TTh 10:30-11:50 (S. Ramachandran)

BIOL 0500. Cell and Molecular Biology.
This course examines the structure and function of the basic unit of an organism, the cell. An experimental approach is used to examine cellular functions, ranging from gene transcription, cell division and protein secretion, to cell motility, and signal transduction. Relevance to health and disease will be considered. Expected: BIOL 0200 (or equivalent placement).
Spr BIOL0500 S01 25438 MW 8:30-9:50 (A. Webb)
BIOL 0510. Introductory Microbiology.
Introduces role of microbes in our understanding of biology at the cellular and molecular level. Focuses on microbial significance for infectious disease, public health, genetics, biotechnology, and biogeochemical cycles. Laboratory involves basic microbiological techniques and selection and manipulation of microbes. Expected: BIOL 0200 (or equivalent placement). Students MUST register for the lecture section, conference, and the lab. Enrollment limited to 108.
Spr BIOL0510 S01 25455 MWF 1:00-1:50(08) (R. Bennett)

BIOL 0530. Principles of Immunology.
Introduction to experimental and theoretical foundations of immunology. Focuses on concepts, landmark experiments and recent advances. Topics include innate and adaptive immunity; structure/function of antibody molecules and T cell receptors; regulation of immune responses through cellular interactions. Applications of concepts to medically significant issues (vaccines, transplantation, inflammation, autoimmune, cancer, HIV/AIDS) are discussed. Interpretative analysis of experimental data is emphasized. Expected background: BIOL 0200 or equivalent placement credit.
Fall BIOL0530 S01 15660 TTh 2:30-3:50(03) (R. Bungiro)

BIOL 0800. Principles of Physiology.
Introduction to the function and integration of organ systems with an emphasis on human physiology. Includes basic concepts in cell and organ system physiology as well as fundamentals of modern trends in physiological science. Emphasizes the application of physical and chemical principles to organ function at both the cellular and systemic levels. Expected: BIOL 0200 or equivalent.
Fall BIOL0800 S01 16047 TTh 10:30-11:50(13) (J. Stein)
Spr BIOL0800 S01 25355 MWF 10:00-10:50(03) (C. Hai)

BIOL 0940A. Viral Epidemics.
This sophomore seminar will examine epidemics (outbreaks) of viral infections from a historical perspective. We will also cover current literature and up to the minute news accounts of infectious disease related outbreaks occurring around the globe. The major focus will be on other viral diseases but any microbial outbreak in the news will be explored. The seminar will cover basic aspects of microbial pathogenesis so one can gain an appreciation of microbial host interactions. Essential writing skills will also be developed. Enrollment limited to 20 sophomore students. WRIT SOPH
Fall BIOL0940A S01 16204 Th 4:00-6:30(04) (W. Atwood)

BIOL 0940B. Sophomore Seminars in Biology: Life in a Shell.
This Sophomore seminar is an examination of broad themes in whole animal physiology with an emphasis on environmental adaptations. The foundation of the course will be the instructor’s recent book “Life in a Shell: A Physiologist’s View of Turtle.” A consideration of this iconic animal’s novel biological traits will lead into comparisons with our own biology and that of other animals. Topics: respiration, circulation, metabolic rate, buoyancy control, overwintering, migration, reproduction, and bone structure and function. Relevant original research papers will be used. Mandatory S/NC; enrollment of 20 students; override required. Expected: BIOL 0200 or equivalent placement credit. SOPH
Fall BIOL0940B S01 16051 T 4:00-6:30(09) (D. Jackson)

BIOL 0940D. Rhode Island Flora: Understanding and Documenting Local Plant Diversity.
This Sophomore Seminar focuses on species level identification of plants in Rhode Island and will cover the dominant plant species in each of the state’s main habitats including coastal wetlands and uplands, freshwater wetlands, peatlands, upland forests, and disturbed areas. Students will learn to identify plants using online interactive keys as well as more technical dichotomous keys and will also cover basic ecological processes in each habitat including the interaction of soils, geology, and hydrology. Materials related to plant morphology, plant taxonomy, plant evolution, understanding phylogenetic trees, and botanical illustration. Pre-requisites: BIOL 0200. Instructor permission required. SOPH
Fall BIOL0940D S01 16379 F 1:00-5:00 (T. Whitfield)

BIOL 0960. Independent Study in Science Writing.
Incorporates a nontechnical science journalism component into the BioMed curriculum. A series of four to six specific assignments are recommended, based on topics derived from another biology course taken previously by the student, whose instructor has agreed to serve as a BIOL 0960 sponsor. Assignments may include, for example, investigative or analytical reviews, or feature articles on ethical or social impacts of new discoveries. The student and instructor schedule meetings to discuss topics and due dates, review rough drafts, and evaluate completed work. Not for concentration credit in the biological sciences programs. Permission must be obtained from the instructor prior to registering. Section numbers vary by instructor. Half credit.
Spr BIOL0960 S01 25440 M 2:00-5:00 (G. Williams)

BIOL 1040. Ultrastructure/Bioimaging.
This course examines microscopy and image analysis in the life sciences. Theoretical and practical aspects of microscopy will be discussed. Students will obtain hands-on experience with electron microscopy, light microscopy, fluorescence microscopy, and confocal microscopy. Students will learn to display images in 3D. Advanced undergraduates. Instructor permission required.
Fall BIOL1040 S01 16207 TTh 1:00-2:20(10) (K. Miller)

BIOL 1050. Biology of the Eukaryotic Cell.
Examines organelles and macromolecular complexes of eukaryotic cells with respect to structural and functional roles in major cellular activities. Emphasizes experimental basis for knowledge in modern cell biology using original literature, and discusses validity of current concepts. For advanced undergraduates and beginning graduate students. Complementary to BIOL 1270 and 1540. Prerequisites: BIOL 0280 or 0470 or 0500, or instructor permission. Graduate students register for BIOL 2050.
Fall BIOL1050 S01 16207 TTh 1:00-2:20(10) (K. Miller)

This course examines contemporary biotechnologies used to combat the predominant, worldwide problems in human health. Global health will be addressed from the scientific and engineering perspectives while integrating public health policy, health systems and economics, medical and research ethics, and technology regulation and management. This course is intended for graduate and advanced undergraduate students in biology, engineering, or related fields who have an interest in global health initiatives. Expected background: BIOL 0200 and BIOL 0800, or equivalents. Preference will be granted to graduate students in the Biotechnology and Biomedical Engineering programs. Only for related course credit in Biology, and for theme course credit in Health and Human Biology programs. Enrollment limited to 20. Instructor permission required.
Fall BIOL1070 S01 16056 TTh 2:00-3:30 (J. Schell)

BIOL 1090. Polymer Science for Biomaterials.
Basic principles of polymer science and its application in medicine. Topics include basic polymerization chemistry, kinetics of polymerization and depolymerization with emphasis on bioerodable polymers, characterization of polymers by physical methods, bulk and surface properties, behavior of polymers in solutions, crystallization, gelation, and liquid crystals. Hands-on experience with polymer characterization. Expected: CHEM 0350. Enrollment limited to 25.
Fall BIOL1090 S01 16059 T 1:00-3:50 (E. Mathiowitz)

BIOL 1100. Cell Physiology and Biophysics.
Current topics in cell physiology, with an emphasis on membrane-mediated interactions between cells and their environment. Topics may include: ion channel structure, function and regulation; intracellular regulatory molecules; mechanisms of sensory transduction; membrane receptors and second messenger systems; vesicle secretion; and cytoskeletal regulation of cell function. Lectures, discussion, and student presentations of the current literature. Expected: BIOL 0800 or NEUR 0310. Instructor permission required. Registration overrides will not be given out until after the first one or two classes. Enrollment limited to 30, and admission is based on seniority — graduate students, seniors, then juniors. (Not for first and second-year undergraduates.)
Spr BIOL1100 S01 25363 M 3:00-5:30(13) (A. Zimmerman)
BIOL 1110. Topics in Signal Transduction.
Signal transduction is one of the most rapidly developing fields in biomedical sciences. Defects in signaling pathways can be responsible for diseases such as cancer, diabetes, cardiovascular disorders and psychoses. This course offers students an overview of the molecular pathways that allow cells to receive and process signals from their external environment, with an emphasis on the emerging state-of-the-art techniques used in their study. Expected background: BIOL 0200, 0280, 0470, or 0500. Enrollment limited to 20 juniors and seniors. Instructor permission required.
Fall BIOL1110 S01 16061 W 3:00-5:30(17) (E. Oancea)

BIOL 1120. Biomaterials.
A biomaterial is defined as a material suitable for use in medical implants that come in direct contact with patients' tissues. These include polymers, metals, and ceramics, and materials obtained from biological sources or through recombinant biotechnology. Goal: to provide comprehensive coverage of biomaterial science and technology. Emphasizes the transition from replacement to repair strategies. For advanced undergraduates and graduate students. Prerequisite: BIOL 0800 or instructor permission.
Spr BIOL1120 S01 25364 Th 4:00-6:30(17) (B. Zielinski-Habershaw)

BIOL 1160. Principles of Exercise Physiology.
Application of the basic principles of physiology to the study of the response mechanisms of the human body during exercise. Topics include muscle and neural control, energy metabolism, cardiovascular and respiratory effects, endocrinology, principles of training, and special topics (e.g., diving, high altitude, and microgravity). Student presentations based on scientific articles are included. Expected: BIOL 0800 or written permission of the instructor.
Fall BIOL1160 S01 16063 MWF 1:00-1:50(06) (C. Hai)

BIOL 1222A. Current Topics in Functional Genomics.
A technological revolution in genomics has exponentially increased our ability to gather biological data. A host of new methods and types of analysis has arisen to accommodate this dramatic shift in data collection. The broad scope of inquiry has ushered in an era of "system-wide" approaches and brute-force strategies where rare signals can be detected and studied. In this seminar we will cover papers that embody this new approach. Students typically have taken an advanced undergraduate-level course in biology.
Fall BIOL1222A S01 16730 Arranged (N. Neretti)

BIOL 1250. Host-microbiome Interactions in Health and Disease.
Will focus on current understanding of how various microbiomes communicate and interact with the host and the factors that influence these interactions. We will discuss how the new technologies such as metagenomics and metabolomics have enhanced our understanding of host-microbiome interactions in health and disease. Students will have the opportunity to participate in discussions on how to apply recent discoveries to disease processes, health restoration and maintenance. The course will help students develop skills in critical thinking and in reading and evaluating original scientific literature. Expected: students with a background in basic microbiology (BIOL 0530 or its equivalent). 20 enrollment.
Spr BIOL1250 S01 25461 Th 2:30-5:30 (P. Belenky)

BIOL 1260. Physiological Pharmacology.
Covers the physiology of human disease (e.g., Heart failure and arrhythmia; cancer signaling pathways with a focus on breast cancer; neurological disorders such as schizophrenia and Parkinson's disease) and discusses the pharmacology of the drugs used to treat disease. A group of the most commonly prescribed drugs is discussed in terms of their fundamental modes of action and clinical importance. Expected: BIOL 0800.
Fall BIOL1260 S01 16065 TTh 10:30-11:50(13) (J. Marshall)

BIOL 1270. Advanced Biochemistry.
An advanced course in biochemistry, biochemical methods, and reading of the primary literature, featuring systematic coverage of the biochemistry of the central dogma, including DNA (replication, repair, recombination), RNA (regulation and mechanism of transcription, processing, turnover), and proteins structure, synthesis, modification, degradation, mechanisms of action, function). Expected: BIOL 0280, CHEM 0350, 0360. Graduate students register for BIOL 2270.
Fall BIOL1270 S01 16212 Th 2:30-3:50(03) (A. Deaconescu)

Provides a conceptual understanding of molecular events underlying development of human cancer. Focused on genetic changes leading to malignant transformation of cells. Covers cell cycle control, DNA damage, mutagenesis, cancer predisposition syndromes, oncogenic viruses, tumor immunology, metastasis, cancer chemotherapy and drug resistance. Lecture plus discussion of primary literature. Prerequisites: BIOL 0280 OR BIOL 0470 OR BIOL 0500.
Fall BIOL1290 S01 15794 MW 3:00-4:20(17) (A. Zhiltovich)

BIOL 1310. Developmental Biology.
Covers the molecular and cellular events of development from fertilized egg to adult. Genetic basis of body form, cell fate specification and differentiation, processes controlling morphogenesis, growth, stem cells and regeneration will be examined. Differential gene regulation, intercellular signaling and their evolutionary conservation will be central to discussion of mechanisms governing developmental processes. Additional topics: developmental plasticity, impact of epigenetic and environmental factors, and basis of disease gleaned from developmental biology research. Live embryos will complement and reinforce concepts covered in class. Enrollment limited to 36. Expected: BIOL 0200 (or equivalent), and one course in genetics, cell biology or embryology.
Fall BIOL1310 S01 16214 TTh 9:00-10:20(08) (K. Wharton)

This course is an advanced, seminar-based course. Primary literature is emphasized to complement the format of extensive student seminar presentations. It is essential that students have a strong background in biology in order to gain the most from this course. The emphasis of the course is student seminar presentation and extensive discussion on the material. This is often the first opportunity for students to present/discuss science in a seminar format. Expected background: a course in Cell Biology (e.g. BIOL 0500 or 1050), and two additional Biology courses above the introductory (BIOL 0200) level. Enrollment limited to 20.
Spr BIOL1330 S01 25442 M 3:00-5:30(13) (G. Wessel)

BIOL 1425. Phylogenetic Biology.
This course is the study of the evolutionary relationships between organisms, and the use of evolutionary relationships to understand other aspects of organism biology. This course will provide a detailed picture of the statistical, mathematical, and computational tools for building phylogenies and using them to study evolution. Enrollment is by instructor permission. Students will present scientific papers in class and complete a final project consisting of their own phylogenetic analysis. Expected Background: Evolutionary Biology and quantitative methods (such as statistics, computation, or math). Open to juniors, seniors, and graduate students. Enrollment limited to 16.
Spr BIOL1425 S01 25404 TTh 1:00-2:20(10) (C. Dunn)

Population genetics considers the genetic basis of evolution: temporal changes in the genetic composition of populations in response to processes such as mutation, natural selection and random sampling effects. Starting from first principles, this course will develop a theoretical understanding of these dynamics. We will also explore the application of these tools to genomic-scale data in order to quantify the influence of various evolutionary processes at work in natural populations. Assessments will be based on problem sets, two midterm exams and one final exam. Prerequisites: MATH 0100 and one of BIOL 0470 or 0480, or permission.
Fall BIOL1430 S01 16381 MWF 11:00-11:50(16) (D. Weinreich)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
This course will explore foundational concepts in community ecology, and will draw on examples and case studies from marine and terrestrial ecosystems, including species-rich tropical rain forests and coral reefs, the marine intertidal and benthic environments, and species-poor forests and grasslands of the temperate zone. Overarching themes will emphasize theoretical frameworks to understand the evolutionary origins and maintenance of this biological diversity. This will be accomplished using traditional lectures, weekly student-led discussions, readings of the primary literature, and class activities. Expected background: BIOL 200 or equivalent placement; and BIOL 0420; OR instructor permission. Enrollment limited to 30.
Spr BIOL1450 S01 25406 MWF 10:00-10:50(03) (J. Kellner)

BIOL 1470. Conservation Biology.
Conservation Biology is the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity. Topics covered include: 1) the impacts of global warming, species invasions, and habitat destruction on biodiversity, 2) strategies developed to combat these threats, and 3) a consideration of key economic and ethical tradeoffs. Special attention will be paid to current debate and controversy within this rapidly emerging field of study. Readings will include the primary literature. A term-paper will be required. Prerequisite: BIOL 0420 or instructor permission. Enrollment limited to 30.
Fall BIOL1470 S01 16382 TTh 9:00-10:20(08) (D. Sax)

BIOL 1500. Plant Physiological Ecology.
An in-depth look at plant ecological strategy, focusing on the anatomical and physiological adaptations of plants to particular environments. Additional topics include plant-animal interactions, historical biogeography, and community assembly processes. A comparative, phylogenetic approach is emphasized. Lectures present a broad overview of topics, and discussions focus on current outstanding problems. Lab exercises provide hands-on experience in designing experiments, measuring plant performance, and scientific writing. Required laboratory hours to be arranged by the instructor. Expected: BIOL 0430 or BIOL 0440. Enrollment limited to 15.
Spr BIOL1500 S01 25509 MW 10:30-11:50 (E. Edwards)

BIOL 1520. Innate Immunity.
Innate immunity is the initial response to microbes that prevents infection of the host. It acts within minutes to hours, allowing the development of the adaptive response in vertebrates. It is the sole mechanism of defense in invertebrates such as insects. The components and mechanisms dictating this response are explored. Prerequisite: BIOL 0530. Enrollment limited to 30. Graduate students must obtain instructor permission.
Fall BIOL1520 S01 15661 MW 8:30-9:50(01) (L. Brossay)

BIOL 1540. Molecular Genetics.
Even in this era when whole genome DNA sequencing has become routine, there are still thousands of eukaryotic genes with unknown functions. Genetic screens for mutations that alter pathways of interest remain the premier approach to understanding gene function in the context of the organism. In Molecular Genetics students will learn the key concepts involved in designing and interpreting genetic screens using the powerful tools available in model animal, plant, and fungal organisms. Students will also learn how to understand and analyze results presented in the primary scientific literature. Furthermore, students will gain an appreciation of how the field of genetics has changed through discoveries and technological advances made over the past 50 years. Graduate students should register for BIOL 2540.
Spr BIOL1540 S01 25444 TTh 2:30-3:50(11) (J. Bender)

BIOL 1545. Human Genetics and Genomics.
This course will exemplify the power of genetically informed approaches to understanding human biology. It is intended for advanced undergraduate students and graduate students; prerequisites include BIOL0470 or equivalent. The course is based in lectures, reading material (textbook and primary literature), and in-class discussions. Course topics include: medical genetics and genomics; methods to study human genotypes and related phenotypes; industry-related topics; and ethical and societal implications of genome science. It will benefit students with career interests in basic science, medicine, biotechnology, or science policy. Enrollment is limited to 20 students; selection will be based on seniority, prerequisites, and registration order.
Spr BIOL1545 S01 25446 TTh 9:00-10:20(01) (E. Morrow)

BIOL 1550. Biology of Emerging Microbial Diseases.
Emerging diseases influence the health of human populations in less developed countries and are expected to have similar effects worldwide. Rising incidence of “new” diseases underscores the need for knowledge of infection mechanisms and their outcomes. Focuses on biochemical, genetic, cellular and immunological events of emerging pathogens and host responses. Expected: BIOL 0470 or BIOL 0530.
Spr BIOL1550 S01 25462 MWF 1:00-1:50(06) (C. de Graffenried)

BIOL 1600. Development of Vaccines to Infectious Diseases.
Provides background steps involved in vaccine development, from conceptualization to production to deployment. Considers infectious diseases and associated vaccines in context of community health. Appropriate for students wanting to gain an understanding of vaccine science. Provides a foundation for advanced courses in immunology and infectious disease, biomedical research, or medical/graduate studies. Activities include a weekly section meeting for discussion of relevant primary literature, and a final project of the student’s choice in the form of an in–class presentation, a research paper or an approved alternate format. Expected: BIOL 0200 or equivalent placement; BIOL 0530, and at least one additional biology course.
Spr BIOL1600 S01 24624 MW 3:00-4:20(14) (R. Bungiro)

BIOL 1820. Environmental Health and Disease.
Fundamental concepts relating to the adverse effects of chemical agents on human health. Topics include dose-response relationships, absorption, distribution, metabolism, excretion, mechanisms of toxicity, and the effects of selected environmental toxics on organ systems. Many of these concepts will be reinforced through the use of a case-study approach where a pertinent environmental issue is incorporated into the ongoing lectures. Expected: BIOL 0500 and BIOL 0800, plus either ENVS 0490 or BIOL 0420.
Advanced students have priority.
Spr BIOL1820 S01 24623 MW 8:30-9:50(02) (J. Plavíček)

BIOL 1920D. Race, Difference and Biomedical Research: Historical Considerations.
This advanced seminar places the current debate over race, health, and genetics in historical context. An overarching goal is to understand how the social world informs the scientific questions we ask, design of research studies, and interpretation of findings. How have the theories and practices of biomedical science and technology produced knowledge of “race” and racial difference historically? How does race relate to gender and class? What are the implications of this debate for understanding health inequality? Previous coursework in Africana Studies, biomedical science, history of science, and/or science and technology studies preferred. Enrollment limited to 20; instructor permission. WRIT
Spr BIOL1920D S01 24622 W 3:50-5:30(14) (L. Braun)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Directed research/independent study in biological sciences: basic science, social studies of biomedical science, and clinically-oriented projects, mentored by individual faculty members in the Division of Biology and Medicine. Sites include campus and hospital based facilities. Projects can serve as the basis for Honors theses, or to fulfill research requirements in a Bio-Med concentration program. Students planning to use 1950/1960 to fulfill a concentration requirement must receive approval from the concentration advisor. No more than two (2) semesters of BIOl 1950/1960 may be used toward a concentration program in the biological sciences. Faculty from outside the Division may supervise projects for bio-med program concentrators, but should do so using their Department's own Independent Study course number.

Directed research/independent study in biological sciences: basic science, social studies of biomedical science, and clinically-oriented projects, mentored by individual faculty members in the Division of Biology and Medicine. Sites include campus and hospital based facilities. Projects can serve as the basis for Honors theses, or to fulfill research requirements in a Bio-Med concentration program. Students planning to use 1950/1960 to fulfill a concentration requirement must receive approval from the concentration advisor. No more than two (2) semesters of BIOl 1950/1960 may be used toward a concentration program in the biological sciences. Faculty from outside the Division may supervise projects for bio-med program concentrators, but should do so using their Department's own Independent Study course number.

BIOl 1970A. Stem Cell Biology.
Senior seminar course will provide an interactive forum by which to up to twenty seniors (and qualified juniors with permission) will explore the biology of stem cells from their humble beginnings in the embryo to their potential use in regenerative medicine. The potency and regulation of embryonic and adult stem cell populations derived from diverse organisms will be contrasted with laboratory-derived human stem-like cells for biomedical applications. Critical reading of classical and modern literature in the field of stem cell biology will form the basis of student-led presentations, papers and ethical forums. Expected: biochemistry, genetics and/or cell biology. Instructor permission; 20 students. Fall BIOl1970A S01 16218 M 2:00-4:30 (R. Freiman)

BIOl 2010. Quantitative Approaches to Biology.
Graduate level introduction to quantitative and computational methods in modern biology. Topics include Programming, Modeling, Algorithms, Bioinformatics, Applied Statistics, Structural Biology, Molecular Dynamics, Enzyme Kinetics, and Population and Quantitative Human Genetics. Preference is given to graduate students in Molecular Biology, Cell Biology and Biochemistry and Molecular Pharmacology, Physiology, and Biotechnology. Limited to 20 students. Instructor permission required. Spr BIOl2010 S01 25450 T 10:00-1:00 (N. Neretti)

This course, taken the second semester, goes in depth into the numerous strategies in biotechnology. Significant differences in the strategies of small companies versus large companies, and device companies versus drug companies will be discussed with ample use of biotechnology case studies. At the end of this course, the successful student will: Understand the process of managerial decision making in the pharma/biotech industry Understand the basic principles of Decision Science, the application of quantitative analysis (modeling) to inform managerial decision making Gain exposure to basic frameworks and tools used by management consultants to define strategic options Spr BIOl2018 S01 25366 M 5:00-7:30 (Y. Jong)

This course provides a comprehensive overview of the primary functional roles and steps involved in developing and commercializing a novel technology/scientific breakthrough within the biotechnology industry. This course is particularly suitable for students interested in pursuing a career within a biotechnology company, or for those interested in developing an in-depth knowledge of how the science of biotechnology becomes real world products. Pre Requisites: Foundations of Living Systems (BIOl0020), Principles of Physiology (BIOl0080), and Principles of Economics (ECO00110)/equivalent or instructor's permission is required. Fall BIOl2020 S01 16067 Th 4:00-6:30(04) (J. Scott)

A double-credit graduate course on multidisciplinary experimental approaches to biological questions. Focusing on primary literature, lectures and discussions cover the mechanisms and regulation of basic cellular processes involving nucleic acids (synthesis, structure, maintenance and transmission) and proteins (synthesis, maturation, function) and their integration into more complex circuits (signaling, organelle biogenesis and inheritance, cell cycle control). Required for PhD students in the MCB Graduate Program; all others must obtain instructor permission. Enrollment is limited to graduate students. Fall BIOl2030 S01 16224 MTT 9:00-10:20 (A. DeLong) Fall BIOl2030 S01 16224 F 10:00-11:35 (A. DeLong)

BIOl 2040. Ultrastructure/Bioimaging.
This course examines microscopy and image analysis in the life sciences. Theoretical and practical aspects of microscopy will be discussed. Students will obtain hands-on experience with electron microscopy, light microscopy, fluorescence microscopy, and confocal microscopy. Students will learn to display images in 3D. For graduate students and advanced undergraduates. Instructor permission required. Spr BIOl2040 S01 25441 M 2:00-5:00 (G. Williams)

(Undergraduate students should register for BIOl 1050.) Fall BIOl2050 S01 16209 TTh 1:00-2:20(10) (K. Miller)

BIOl 2110. Drug and Gene Delivery.
Topics in drug delivery systems including history of the field, advantages of controlled release technology, stabilization and release of proteins, fabrication methods, regulatory considerations, economic aspects, patents and intellectual property rights, and more. Prepares students for research in industry and academia, and offers information for consultants in the field. Expected: BIOl 1090, 1120, CHEM 0350, 0360. Fall BIOl2110 S01 16078 M 3:00-5:30(15) (E. Mathiowetz)

BIOl 2125. Bioinformatics in the Discovery, Development and Use of Medicines.
This course explores the use of bioinformatics in the discovery, development and use of medicines. The purpose is to enable students to understand and contribute to work in the field. Goals are for students to i) learn about core practices of bioinformatics, ii) understand the relevance of bioinformatics for evidence generation and decisions over the life of a therapeutic, and iii) apply their learning to develop of a novel, interdisciplinary research proposal that could facilitate precision medicine approaches for either Parkinson’s disease or pancreatic cancer. Pre Requisites: BIOl 0080 or equivalent, or permission of the instructor. Fall BIOl2125 S01 16561 Th 9:00-11:30 (R. Campbell) Spr BIOl2125 S01 25368 WF 10:30-11:50 (R. Campbell)

Focused on the effective dissemination of scientific information. Through practical examples of activities common to the profession (writing a grant proposal, presenting research work orally, and preparing a critical review of a submitted scientific manuscript), students will develop the skills necessary to effectively communicate scientific ideas, experiments and results. Each of the activities will be dissected into key sets that will be individually developed with the aid of interactive discussions and peer review. Enrollment limited to 12 graduate students. Fall BIOl2150 S01 16226 F 12:00-3:30 (K. Mowry) Fall BIOl2150 S02 16227 F 12:00-3:30 (J. Bender)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
BIOL 2156. Special Topics in Biotechnology Writing.
This course is open to Biotechnology Masters students not involved in lab-based research. Students choose from a list of topics and faculty mentors in the field of biotechnology. Teams conduct in-depth research and writing, with the goal of producing a final report and presentation equivalent to a professional consultant’s report. Students meet weekly with mentor to monitor progress. Prerequisite: BIOL 0280 and 1120; CHEM 0350/0360 or equivalent. Enrollment limited to 20 students. Instructor permission required. Course is offered in both, Semester 1 and 2, and may be repeated once for credit.

Spr BIOL2156 S01 25372 Arranged (E. Mathiowitz)

BIOL 2167. In Vitro Models for Disease.
This course will use case studies to examine high burden diseases, their pathophysiology, treatment, and the models used to study the disease. Literature will be used to discuss the current models for the disease and the associated limitations of each of these models. The course will also cover the use of animals in research and how new in vitro models could be used to decrease their use. This course is intended for graduate students in biology, engineering, or related fields. Prerequisites: BIOL 0200 and 0800, or equivalent. Enrollment limited to 20 graduate students.

Spr BIOL2167 S01 25374 T 1:30-3:20 (J. Schell)

BIOL 2170. Molecular Pharmacology and Physiology.
Fundamental concepts in pharmacology and physiology from the cellular/molecular level to organ systems. Required of first-year graduate students in Molecular Pharmacology and Physiology.

Fall BIOL2170 S01 16562 MWF 10:00-11:30 (D. Horrigan)

BIOL 2180. Experiential Learning Industry, ELI.
Experiential Learning in Industry is restricted to biomedical engineering (BME) Sc.M. and biotechnology (Biotech) Sc.M. students, permission also required. The course is an extended in-depth learning experience in an industry environment related to the discipline of BME and Biotech. Industry environments include; medical device, pharmaceutical or biotechnology and industries that provide BME and Biotech relevant services to the aforementioned companies including patent law, licensing, regulatory and consulting. Students will pursue Experiential Learning in Industry during one summer plus one semester or during two semesters for which they will receive credit towards their degree. This course is restricted to BME and Biotech Masters students only. Students must have successfully completed the first year of the BME Masters Program. Slots are limited so permission is required.

Fall BIOL2180 S01 16564 Arranged (B. Zielinski-Habershaw)

Spr BIOL2180 S01 25376 Arranged (B. Zielinski-Habershaw)

BIOL 2190. MPPB Professional Development Seminar.
Professional development seminar required of all first year graduate students in the Molecular Pharmacology and Physiology Graduate Program, and open to graduate students in other programs. Topics include grants and funding, effective oral presentation skills, alternative careers in science, and others. All students will be required to present a research seminar during the scheduled class time.

Instructor permission required for graduate students outside the Molecular Pharmacology and Physiology Graduate Program. Not intended for undergraduate students.

Fall BIOL2190 S01 16565 M 12:00-1:30 (D. Horrigan)

BIOL 2222B. Current Topics in Functional Genomics.
A technological revolution in genomics has exponentially increased our ability to gather biological data. A host of new methods and types of analysis has arisen to accommodate this dramatic shift in data collection. The broad scope of inquiry has ushered in an era of “system-wide” approaches and brute-force strategies where rare signals can be detected and studied. In this seminar we will cover papers that embody this new approach. Students typically have taken an advanced undergraduate-level course in biology.

Fall BIOL2222B S01 16805 Arranged (N. Neretti)

BIOL 2230. Biomedical Engineering and Biotechnology Seminar.
Required of all first- and second-year graduate students in the Biomedical Engineering and Biotechnology Seminar graduate program, and open to others. Concepts of drug delivery and tissue engineering, implantation biology, and cellular therapy, as well as the research projects directed by program faculty. Students present research seminars and participate in presentations by outside speakers. Includes Journal Club activities. Open to graduate students only.

Fall BIOL2230 S01 16567 T 4:30-7:00 (E. Darling)

BIOL 2240. Biomedical Engineering and Biotechnology Seminar.
See Biomedical Engineering and Biotechnology Seminar (BIOL 2230) for course description.

Spr BIOL2240 S01 25380 T 4:30-7:10 (J. Morgan)

Blood serves many critical functions including respiratory gas transport, hemostasis and host defense. Plasma and cellular components of blood, their functional mechanisms, pathophysiologic consequences when deficient and current treatments will be reviewed. Finally, development of blood component substitutive therapeutics (blood substitutes) based on protein and cellular engineering technologies (biotherapeutics) will be discussed. Open to Graduates students and Juniors and Seniors who meet the pre-requisites BIOL 0800 and BIOL 0280 or with instructor's permission.

Fall BIOL2245 S01 16569 MW 10:30-11:50 (H. Kim)

BIOL 2260. Physiological Pharmacology.
The objective of this course is to present drugs in the context of the diseases they are used to treat. A list of the Common medically prescribed drugs will be discussed in terms of their fundamental modes of action and clinical importance. Pertinent background biochemistry, physiology, and pathology is provided, e.g., the electrophysiology of the heart is discussed as a background to anti-arrhythmic drugs. Course is relevant for students interested in medicine journalism, law, government, precollege teaching, biomedical research, and pharmacy. Expected: background in physiology. For graduate students ONLY register for BIOL 2260 (enrollment limit 15); all others BIOL 1260.

Fall BIOL2260 S01 16066 TTh 10:30-11:50(13) (J. Marshall)

BIOL 2270. Advanced Biochemistry.
(Undergraduate students should register for BIOL 1270.)

Fall BIOL2270 S01 16213 TTh 2:30-3:50(03) (A. Deaconescu)

BIOL 2310. Developmental Biology.
Covers the molecular and cellular events of development from fertilized egg to adult. Genetic basis of body form, cell fate specification and differentiation, processes controlling morphogenesis, growth, stem cells and regeneration are examined. Differential gene regulation, intercellular signaling and evolutionary conversation are central to discussion of mechanisms governing developmental processes. Additional topics: developmental plasticity, impact of epigenetic and environmental factors, and basis of disease gleaned from developmental biology research. Live embryos complement and reinforce concepts covered in class. Expected: BIOL0200 (or equivalent), and one course in genetics, embryology, cell biology or molecular biology. Enrollment limited to 36. (Undergraduate students register for BIOL 1310.)

Fall BIOL2310 S01 16216 TTh 9:00-10:20(08) (K. Wharton)

BIOL 2340. Neurogenetics and Disease.
Genetic mutations provides a powerful approach to dissect complex biologic problems. We will focus on fascinating discoveries from "forward genetics" studies – moving from nervous system phenotype to genetic mutation discovery. There will be an emphasis of neurologic disease phenotypes and the use of novel genomic methods to elucidate the central molecular and cellular causes for these conditions. The course will emphasize the use of “reverse genetics” – engineered mutations in model systems – to dissect nervous system function and disease mechanisms. Disorders to be covered include autism, intellectual disability, schizophrenia, epilepsy. Enrollment limited to 20. Instructor permission required.

Fall BIOL2340 S01 16228 W 3:00-5:50 (R. Reenan)
### BIOL 2350. The Biology of Aging

Studying the mechanisms underlying the process of aging promises to be one of the next frontiers in biomedical science. Understanding the biology of aging is important for the long-term possibility of increasing life span, and for the immediate benefits it will have on age-related diseases. As demographics of industrialized countries have changed, age-related diseases such as cancer/cardiovascular/stroke, osteoporosis/arthritis/Alzheimer's have assumed epidemic proportions. Understanding the aging process is a pre-requisite for designing interventions for treatment. Focus is on examining the biology of aging through the examination of a molecular/cellular/genetic and demographic nature. Suggested prerequisites: BIOL 0200, 0280, 0470, 0800. Enrollment limited to 20. Advanced undergraduates with permission of instructor.

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<tr>
<th>Course Code</th>
<th>Section</th>
<th>Instructor</th>
<th>Days</th>
<th>Time</th>
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<tr>
<td>BIOL2350</td>
<td>S01</td>
<td>25408</td>
<td>Th</td>
<td>2:00-5:00</td>
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(S. Helfand)

### BIOL 2430. Topics in Ecology and Evolutionary Biology

Current literature in ecology, behavior, and evolutionary biology is discussed in seminar format. Topics and instructors change each semester. Representative topics have included: structuring of communities, biomechanics, coevolution, quantitative genetics, life history strategies, and units of selection. Expected: courses in advanced ecology and genetics.

Fall BIOL2430 S01 16384 Arranged(17) (D. Rand)
Fall BIOL2430 S02 16774 Arranged 'To Be Arranged'

### BIOL 2440. Topics in Ecology and Evolutionary Biology

See Topics In Ecology And Evolutionary Biology (BIOL 2430) for course description.

Spr BIOL2440 S01 25409 Arranged 'To Be Arranged'
Spr BIOL2440 S02 25493 Arranged 'To Be Arranged'

### BIOL 2450. Exchange Scholar Program

Fall BIOL2450 S01 14949 Arranged 'To Be Arranged'
Fall BIOL2450 S02 14950 Arranged 'To Be Arranged'

### BIOL 2528. Innovation and Commercialization in Medical Devices, Diagnostics, and Wearables

This course provides a comprehensive overview of concepts and steps involved in developing and commercializing novel technology/scientific breakthroughs for medical devices, diagnostics and wearables. This course is particularly suitable for students interested in pursuing a career within a medical device segment, or creating innovation-based companies, as well as for those interested in developing an in-depth knowledge of evolution of medical devices from research concepts to products in the market.

Spr BIOL2528 S01 25382 Th 9:30-12:00 (M. Analoui)

### BIOL 2540. Molecular Genetics

Even in this era when whole genome DNA sequencing has become routine, there are still thousands of eukaryotic genes with unknown functions. Genetic screens for mutations that alter pathways of interest remain the premier approach to understanding gene function in the context of the organism. In Molecular Genetics students will learn the key concepts involved in designing and interpreting genetic screens using the powerful tools available in model animal, plant, and fungal organisms. Students will also learn how to understand and analyze results presented in the primary scientific literature. Furthermore, students will gain an appreciation of how the field of genetics has changed through discoveries and technological advances made over the past 50 years. Undergraduate students should register for BIOL 1540.

Spr BIOL2540 S01 25445 TTh 2:30-3:50(11) (J. Bender)

### BIOL 2545. Human Genetics and Genomics

This course will exemplify the power of genetically informed approaches to understanding human biology. It is intended for advanced undergraduate students and graduate students; prerequisites include BIOL0470 or equivalent. The course is based in lectures, reading material (textbook and primary literature), and in-class discussions. Course topics include: medical genetics and genomics; methods to study human genotypes and related phenotypes; industry-related topics; and ethical and societal implications of genome science. It will benefit students with career interests in basic science, medicine, biotechnology, or science policy. Enrollment is limited to 20 students; selection will be based on seniority, prerequisites, and registration order.

Spr BIOL2545 S01 25449 TTh 9:00-10:20(01) (E. Morrow)

### BIOL 2640A. Viral Immunology

Viral Immunology is an advanced topics course in Microbiology and Immunology which will be focused on viral immunology. Weekly meetings will cover different issues concerning defense against viral infections and pathology related to viral infection, with focus on viral-host interactions. Topics will be selected to present either important basic concepts in the context of immune responses and/or major challenges in controlling viral infections. Recent advances in understanding virus-host interactions, host responses to viruses, cytokine regulation of immune responses or cytokine-mediated pathology during viral infections will be emphasized.

Spr BIOL2640A S01 24626 W 2:00-4:00 (C. Biron)

### BIOL 2860. Molecular Mechanisms of Disease

This course is designed for graduate students and focuses on the underlying causes of human disease. Students should have a solid background in the life sciences with an understanding of the fundamental principles of molecular biology, genetics, biochemistry and cell biology. A discussion of cystic fibrosis, using this disease to explore basic principles of molecular biology, genetics, physiology and pathology. Then the course centers on the genetic and environmental basis of disease and carcinogenesis. Will lecture individual student presentations and experimental planning exercises. Emphasis will be placed on the development of presentation skills and research design. Undergraduates require instructor permission.

Fall BIOL2860 S01 15795 Arranged 'To Be Arranged'

### BIOL 2970. Preliminary Examination Preparation

For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall BIOL2970 S01 14851 Arranged 'To Be Arranged'
Spr BIOL2970 S01 23982 Arranged 'To Be Arranged'

### BIOL 2980. Graduate Independent Study

Independent study projects at the graduate level. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall BIOL2980 S01 14952 Arranged 'To Be Arranged'
Spr BIOL2980 S01 23983 Arranged 'To Be Arranged'

### BIOL 2990. Thesis Preparation

For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

Fall BIOL2990 S01 14952 Arranged 'To Be Arranged'
Spr BIOL2990 S01 23983 Arranged 'To Be Arranged'

### BIOL 2995. Thesis

Section numbers vary by instructor. Please see the registration staff for the correct section number to use when registering for this course.

### BIOL XLIST. Courses of Interest to Biology Concentrators

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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BioMed-Neuroscience

NEUR 0010. The Brain: An Introduction to Neuroscience. Introduction to the mammalian nervous system with emphasis on the structure and function of the human brain. Topics include the function of nerve cells, sensory systems, control of movement and speech, learning and memory, emotion, and diseases of the brain. No prerequisites, but knowledge of biology and chemistry at high school level is assumed. Fall NEUR0010 S01 16566 TTh 1:00-2:20(10) (M. Paradiso)

NEUR 0650. Biology of Hearing. Examines the sensory and perceptual system for hearing; the external, middle, and inner ears; the active processes of the cochlea; sound transduction and neural coding; neural information processing by the auditory system; and the nature of auditory perception and its biological substrate. Prerequisite: an introductory course in Neuroscience, Cognitive Science, Physics, Engineering or Psychology. Spr NEUR0650 S01 25199 MWF 1:00-1:50(06) (J. Simmons)

NEUR 0680. Introduction to Computational Neuroscience. An introductory class to computational neuroscience. Students will learn the main tools of the trade, namely differential equations, probability theory and computer programming, as well as some of the main modern neural-modeling techniques. Assignments will include the writing of simple Matlab code. Spr NEUR0680 S01 25190 TTh 2:30-3:50(11) (L. Bienenstock)

NEUR 0700. Psychoactive Drugs and Society. Will examine psychoactive drugs from two perspectives: (1) biological mechanisms of drug action and (2) the impact of psychoactive drug use on society and society attitudes towards psychoactive drug usage. Drugs to be discussed will include alcohol, opiates, cocaine, marijuana, LSD, nicotine and caffeine, as well as drugs used therapeutically to treat psychiatric disorders. This course will benefit students who are interested in exploring both the biological and social aspects of psychoactive drug use. Prerequisite: NEUR 0010 or equivalent. Spr NEUR0700 S01 25191 MW 3:00-4:20(14) (R. Patrick)

NEUR 1020. Principles of Neurobiology. A lecture course covering fundamental concepts of cellular and molecular neurobiology. Topics include structure of ion channels, synaptic transmission, synaptic development, molecular mechanisms of synaptic plasticity, learning and memory and neurological diseases. Prerequisite: NEUR 0010. Strongly recommended: BIOL 0200 or equivalent. Spr NEUR1020 S01 25192 TTh 9:00-10:20(01) (C. Aizenman)

NEUR 1030. Neural Systems. This lecture course examines key principles that underlie the function of neural systems ranging in complexity from peripheral receptors to central mechanisms of behavioral control. Prerequisite: NEUR 0010 or the equivalent. First year students require instructor approval. Fall NEUR1030 S01 16588 TTh 10:30-11:50(13) (M. Linden)

NEUR 1440. Neural Dynamics. Neurons and systems of neurons vary in their activity patterns on millisecond to second time scales, commonly referred to as "neural dynamics." This course addresses mechanisms underlying this flexibility and its potential meaning for information processing in the brain. The course integrates biophysical, single neuron and human studies. Examples topics include the impact of attention on neural firing rates, oscillations and sensory representation in neocortex, and the origins and potential meaning of the dynamics during sleep. Students will be introduced to computational modeling as a method to gain insight into dynamics, but no prior mathematics or programming background is required. Fall NEUR1440 S01 16583 Arranged (C. Moore)

NEUR 1540. Neurobiology of Learning and Memory. Exploration of learning and memory from the molecular to the behavioral level. Topics will include declarative and procedural memory formation and storage, associative and non-associative learning, cellular and molecular mechanisms for learning, and disorders affecting learning and memory. Examples will be drawn from numerous brain areas and a variety of model systems, including humans. Students will gain experience interpreting experiments from primary literature. Prerequisite: NEUR 1020. WRIT Spr NEUR1540 S01 25197 MWF 11:00-11:50(04) (M. Linden)

NEUR 1600. Experimental Neurobiology. Intensive laboratory experience in neuroscience appropriate for students with basic background in Neurobiology. Learn and employ the classical neurophysiological techniques of extracellular recording, intracellular recording and receptive field mapping using a variety of animal species. Experiments will include recording of sensory signals in the cockroach leg; frog sciatic nerve and sciatic nerve/muscle preparation; intracellular recording of neurons in Aplysia; receptive field mapping in frog skin; and visual field mapping in the frog tectum. Instruction on and practice of effective science writing is another component to this course. Labs are supplemented by informal lectures. Enrollment limited to 18. WRIT Spr NEUR1600 S01 25248 W 12:00-12:50 (J. Stein)
Spr NEUR1600 S02 25390 W 1:00-5:50 (J. Stein)

NEUR 1650. Structure of the Nervous System. Combined lecture and laboratory course on the anatomy of the central nervous system. Lectures survey the circuitry of the major neural systems for sensation, movement, cognition, and emotion. Laboratory exercises (Mon. 10:30-12:30) include brain dissections, microscopy of neural tissue, and discussion of clinical cases. Prerequisites: NEUR 0010, 1020, and 1030. Sign-up sheet in Sidney Frank Hall, Room 315 beginning on the first day of registration. Instructor permission required. Fall NEUR1650 S01 16588 TTh 2:30-3:50(03) (D. Berson)

NEUR 1670. Neuropharmacology and Synaptic Transmission. Synaptic transmission will be studied from a biochemical and pharmacological point of view. We will explore the factors regulating neurotransmitter synthesis, storage, release, receptor interaction, and termination of action. Proposed mechanisms of psychoactive drugs and biochemical theories of psychiatric disorders will be examined. Prerequisites: NEUR 0010 and BIOL 0200 or the equivalent. Fall NEUR1670 S01 16585 TTh 9:00-10:20(08) (R. Patrick)

NEUR 1740. The Diseased Brain: Mechanisms of Neurological and Psychiatric Disorders. The goals of this course are to illustrate what basic science can teach us about neurological disorders and how these pathologies illuminate the functioning of the normal nervous system. Consideration will be given to monallelic diseases (e.g. Fragile X Syndrome, Duchenne Muscular Dystrophy and Tuberous Sclerosis) as well as genetically complex disorders, such as Autism, Schizophrenia and Alzheimer's Disease. Emphasis will be on the cellular and molecular basis of these disorders and how insights at these levels might lead to the development of therapies. Prerequisites: NEUR 1020. BIOL 0470 suggested. Spr NEUR1740 S01 25199 MW 8:30-9:50(02) (J. Fallon)

NEUR 1930G. Disease, Mechanism, Therapy: Harnessing Basic Biology for Therapeutic Development. The recent surge in understanding the cellular and molecular basis of neurological disease has opened the way for highly targeted drug discovery and development. In this course we will use several case studies to illuminate how mechanistic insights are being translated into novel therapeutic approaches. Instructors permission required. Enrollment limited to 15. Sign-up sheet in Sidney Frank Hall, Room 315 beginning on the first day of registration. Fall NEUR1930C S01 16589 Arranged (J. Fallon)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
NEUR 1930I. Neural Correlates of Consciousness.  
This course will consider the neuroscience of consciousness from a variety of perspectives, using examples from behavior, neurophysiology, neuroimaging and neurology. The course content will focus on primary literature, using review articles for background. Students will lead discussions. Sign-up required by Google Docs. Strongly Recommended: NEUR 1030. Enrollment limited to 15. Instructor permission required.

Spr NEUR1930I S01 25205 Arranged (J. Sanes)

NEUR 1930N. Region of Interest: An In-Depth Analysis of One Brain Area.  
In-depth exploration of one region of the brain. Topics will include: cell types and properties; synaptic properties; plasticity; connections to other brain areas; sub-divisions within the area; the region’s role in sensation and perception; the region’s role in action and behavior; the region’s role in learning and memory; and diseases and disorders. Students will gain a deeper understanding of concepts and principles that apply throughout the brain. Students will gain experience with primary literature and learn about techniques for studying the area. Sign-up sheet in Sidney Frank Hall, Room 315 beginning on the first day of registration. Topic for Fall 2016: The Amygdala.

Fall NEUR1930N S01 16591 Arranged (W. Truccolo)

NEUR 1940B. Neuroethology.  
Neuroethology is concerned with the neural systems serving such naturally occurring behaviors as orientation in the environment, finding food, predator detection, social communication, circadian and seasonal rhythms, and locomotion and tracking. This seminar will examine selected examples of the neuroethological approach to analysis of brain function, which sometime leads to conclusions different from those of laboratory-based experiments on traditional animal models. Sign-up sheet in Sidney Frank Hall, Room 315 beginning on the first day of registration. Instructor permission required.

Spr NEUR1940B S01 25208 M 3:00-5:30(13) (J. Simmons)

NEUR 1940G. Drugs and the Brain.  
This is a seminar course devoted to the reading and analyzing of original research articles dealing with the interaction between drugs and the brain. This will include drugs used to analyze normal brain function, as well as drugs of abuse and drugs used for therapeutic purposes. This course is intended for undergraduate and graduate students with a strong background in neuropharmacology. Sign-up sheet in Sidney Frank Hall, Room 315 beginning on the first day of registration. Prerequisite: NEUR 0010, 1020, and 1030. Enrollment limited to 15. Instructor permission required.

Spr NEUR1940G S01 25207 Arranged (R. Patrick)

Laboratory-oriented research in neuroscience, supervised by staff members. A student, under the guidance of a neuroscience faculty member, proposes a topic for research, develops the procedures for its investigation, and writes a report of the results of his or her study. Independent study may replace only one required course in the neuroscience concentration. Prerequisites include NEUR 0010, 1020 and 1030. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Permission must be obtained from the Neuroscience Department.

Fall NEUR2010 S01 16593 Arranged (G. Bamea)

NEUR 2020. Graduate Pro-Seminar in Neuroscience.  
See Graduate Pro-Seminar In Neuroscience (NEUR 2010) for course description.

Spr NEUR2020 S01 25212 Arranged (G. Bamea)

NEUR 2030. Advanced Molecular and Cellular Neurobiology I.  
Focuses on molecular and cellular approaches used to study the CNS at the level of single molecules, individual cells and single synapses by concentrating on fundamental mechanisms of CNS information transfer, integration, and storage. Topics include biophysics of single channels, neural transmission and synaptic function. Enrollment limited to graduate students.

Fall NEUR2030 S01 16595 Arranged (A. Hart)

NEUR 2040. Advanced Molecular and Cellular Neurobiology II.  
This course continues the investigation of molecular and cellular approaches used to study the CNS from the level of individual genes to the control of behavior. Topics include patterning of the nervous system, generation of neuronal diversity, axonal guidance, synapse formation, the control of behavior by specific neural circuits and neurodegenerative diseases. Enrollment is limited to graduate students.

Spr NEUR2040 S01 25210 Arranged (G. Bamea)

Focuses on systems approaches to study nervous system function. Lectures and discussions focus on neurophysiology, neuroimaging and lesion analysis in mammals, including humans. Computational approaches will become integrated into the material. Topics include the major cognitive systems, including perception, decisions, learning and memory, emotion and reward, language, and higher cortical function. Instructor permission required.

Fall NEUR2050 S01 16764 Arranged (D. Sheinberg)

NEUR 2060. Advanced Systems Neuroscience.  
Focuses on cognitive approaches to study nervous system function. Lectures and discussions focus on neurophysiology, neuroimaging and lesion analysis in mammals, including humans. Computational approaches will become integrated into the material. Topics include the major cognitive systems, including perception, decisions, learning and memory, emotion and reward, language, and higher cortical function. Instructor permission required.

Spr NEUR2060 S01 25486 Arranged (T. Desrochers)

NEUR 2110. Statistical Neuroscience.  
A lecture and computing lab course for senior undergraduate and graduate students with background in either systems neuroscience or applied math/biomedical engineering on the statistical analysis and modeling of neural data, with hands-on Matlab/Octave/Python-based applications to real and simulated data. Topics will include signal processing, hypothesis testing and statistical inference, modeling of multivariate time series and stochastic processes in neuroscience and neuroengineering, neural point processes, time and spectral domain analyses, and state-space models. Examles datasets include neouronal spike trains, local field potentials, ECoG/EEG, and MRIs. Sign-up sheet in Sidney Frank Hall, Room 315 beginning on the first day of registration. Instructor permission required.

Fall NEUR2110 S01 16719 Arranged (W. Truccolo)

NEUR 2970. Preliminary Examination Preparation.  
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall NEUR2970 S01 15011 Arranged (D. Sheinberg)

Spr NEUR2970 S01 24032 Arranged (D. Sheinberg)

NEUR 2980. Graduate Independent Study.  
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. S/NC

NEUR 2990. Thesis Preparation.  
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

Fall NEUR2990 S01 15012 Arranged (D. Lipscombe)

Spr NEUR2990 S01 24033 Arranged (D. Lipscombe)

Medical Education

For students enrolled in the Primary Care-Population Medicine program at Alpert Medical School, this course is structured to allow students to conduct research focused on population health with a mentor at Brown University.
Program in Liberal Medical Education
PLME 1000. PLME Senior Seminar in Scientific Medicine.
This course is an interdisciplinary and integrative science course that will supplement the preparation of both PLME and pre-medical students for the study of medicine in the 21st century. The course will use a case-based approach to relevant and contemporary subjects in medicine and health care, such as: biological systems and their interactions; diagnosis and therapy optimization; and the humanistic aspects of patient care. The course is intended for seniors interested in attending medical school but will preferentially enroll PLME students. Prerequisite: PLME competency in Biology, Chemistry (inorganic and organic), Physics, and introductory calculus. Enrollment limited to 40. S/Nc
Fall PLME1000 S01 15071 MW 8:30-5:50(01) (J. Ip)

Business, Entrepreneurship and Organizations

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Offered By</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
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<tr>
<td>BEO 1930A</td>
<td>BEO Capstone I: Organizational Studies Track</td>
<td>3</td>
<td></td>
<td>TTh</td>
<td>'To Be Arranged'</td>
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<td></td>
<td>The first in a two-semester Capstone for BEO Organizational Studies track seniors, open to all BEO seniors. Capstone builds upon concepts covered in BEO courses, specifically concepts from SOC 1311 and 1315. Students will synthesize knowledge at several levels: across disciplines, across theoretical understanding and practical application, and across private and public sector experiences of entrepreneurship and innovation. Students will be organized into client mentored teams for social entrepreneurship and social innovation projects. BEO 1930A (fall) required; 1940A (spring) strongly advised for all Organizational Studies track seniors. Application required to match students to projects. Project team meetings required outside scheduled lectures. WRIT</td>
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<td>BEO 1930B</td>
<td>BEO Capstone I: Entrepreneurship and Technology Management Track</td>
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<td>The first in a two-semester Capstone required of BEO Tech track seniors. Student teams from Engineering, BEO and other technical and non-technical disciplines form simulated high tech start-up companies working on mentor-defined opportunities. Concepts reviewed in class include: product commercialization, intellectual property, marketing, product requirements documentation, team building, safety, environmental and legal requirements. BEO Tech track concentrators should complete ENGN 1010 prior to course. Enrollment is limited. Students must complete formal application (BEO Tech track seniors automatically approved). Project team meetings required outside scheduled lectures. Non-BEO concentrators require instructor permission. WRIT</td>
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<td>BEO 1930C</td>
<td>BEO Capstone I: Business Economics Track</td>
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<td>'To Be Arranged'</td>
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<td>Designed for BEO Business Economics track seniors, this capstone is open to all BEO students, and builds upon BEO concepts in economics, finance, strategy and markets. Students form teams to solve existing business problems, simulating groups of consultants. Projects range from recommending appropriate finance for new investments to project evaluation and pricing of new services. Student teams have client-mentors. Students apply analytical frameworks of BEO disciplines to hone writing, presentational, leadership and organizational skills. Application required to match students to projects. Project team meetings required outside scheduled lectures. WRIT</td>
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<td>'To Be Arranged'</td>
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<td>Continuation of Semester 1, BEO Capstone I: Organizational Studies Track (BEO 1930A). This course involves the completion of team projects begun in fall semester. WRIT</td>
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BEO 1970. Independent Study
Course allows concentrators to complete BEO 1930 as an independent study due to scheduling conflicts.

Chemistry

CHEM 008E. Exploration of the Chemistry of Renewable Energy.
The various types of renewable energy sources will be explored through classroom discussions, activities, and laboratories. Students will learn about the various types of renewable energy sources and the chemistry associated with each. The course will include short laboratories to illustrate the application of the energy sources. Renewable energy will be discussed in relationship to environmental factors and social impact. Active learning strategies will be used throughout the course. For students of all disciplines who are interested in obtaining an understanding of renewable energy. FYS
Fall CHEM008E S01 16828 TTh 9:00-10:20(08) (K. Hess)

CHEM 0100. Introductory Chemistry.
Explores stoichiometry, atomic and molecular structure, chemical bonding, solutions, gases, chemical reactions, equilibria, thermochemistry. Three hours of lecture, one conference per week, no laboratory section. S/Nc
Fall CHEM1000 S01 16603 TTh 9:00-10:20(08) 'To Be Arranged'

CHEM 0330. Equilibrium, Rate, and Structure.
Explores the electronic structure of atoms and molecules, thermodynamics, solution equilbrium, electrochemistry, chemical kinetics, and reaction mechanisms. Course includes lecture and laboratory sections. Laboratory cannot be taken without the lecture. Students who previously passed 0330 lab may be excused from repeating the lab portion of the course. Required background: CHEM 0100 or AP Chemistry 4 or CHEM Placement Test 8 or IBC Chemistry.
Fall CHEM0330 M01 16612 Arranged 'To Be Arranged'
Fall CHEM0330 S01 16610 MWF 10:00-10:50(01) 'To Be Arranged'
Fall CHEM0330 S02 16611 TTh 10:30-11:50(13) 'To Be Arranged'
Spr CHEM0330 M01 25261 Arranged 'To Be Arranged'
Spr CHEM0330 S01 25257 TTh 10:30-11:50(09) 'To Be Arranged'

CHEM 0332. Equilibrium, Rate and Structure - Tutorial.
The CHEM 0332 tutorial program offers students a second opportunity to develop mastery of the chemistry concepts taught in the fall semester CHEM 0330: Equilibrium, Rate and Structure course. Students not performing at a passing level in the fall CHEM 0330 course may apply to join the tutorial program. Students accepted into the tutorial program begin by reviewing compound and reaction stoichiometry toward the end of the fall semester. Tutorial students enroll in CHEM 0332 during the spring semester to complete their studies of equilibrium, acid-base equilibria, thermodynamics, atomic and molecular structure and kinetics. There are no lectures in CHEM 0332. Students in the CHEM 0332 tutorial program complete weekly reading reflection assignments, online homework, and weekly problem sets during the fall and spring semesters and participate in two mandatory, regularly scheduled problem sessions during each week of the spring semester. The tutorial program has three midterms and one comprehensive final exam. The first exam is on the same day as the final exam of CHEM 0330 in the fall semester. Admission to the CHEM 0332 tutorial program requires an application and an interview with Prof. Russo-Rodriguez no later than November 20th. To qualify for consideration, a student’s performance on Fall CHEM 0330 exams must be below the passing level AND the student must be on track to pass the laboratory. Accepted students receive a grade of incomplete for the Fall CHEM 0330 course. Upon successful completion of the CHEM 0332 tutorial program in the spring semester, the incomplete in Fall CHEM 330 is replaced by the student’s tutorial program grade. Permission by Prof. Russo-Rodriguez and an override by Ms. Sheila Quigley are both required.
Spr CHEM0332 S01 25262 Arranged 'To Be Arranged'
Spr CHEM0332 S02 25263 Arranged 'To Be Arranged'
Spr CHEM0332 S03 25264 Arranged 'To Be Arranged'
Spr CHEM0332 S04 25265 Arranged 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CHEM 0350. Organic Chemistry.
Sequel to CHEM 0330. Investigates the constitution and properties of the different classes of organic compounds, with considerable attention to reaction mechanisms. The laboratory work involves an introduction to microscale preparative and analytical techniques of organic chemistry and the preparation of representative organic compounds. Three hours of lecture and five hours of prelaboratory and laboratory. Prerequisite: CHEM 0330. Students MUST register for a common meeting, a lecture section, a lab and a conference. If you previously completed CHEM 0350 laboratory but received a grade of no credit in the course, please register for lab section 11. Spr CHEM0350 M01 25270 Arranged "To Be Arranged"
Spr CHEM0350 S01 25266 MWF 9:00-9:50(02) "To Be Arranged"
Spr CHEM0350 S02 25267 TTh 9:00-10:20(01) "To Be Arranged"

CHEM 0360. Organic Chemistry.
Sequel to CHEM 0350. Investigates the constitution and properties of organic compounds at a fundamental level with an introduction to physical organic, bioorganic, and synthetic organic chemistry. Laboratory work is concerned with the identification and characterization of organic compounds, including modern instrumental methods. Three hours of lecture and five hours of prelaboratory and laboratory. Prerequisite: CHEM 0350. Students MUST register for a lecture section, a lab and a conference. If you previously completed CHEM 0360 laboratory but received a grade of no credit in the course, please register for lab section 11. Fall CHEM0360 M01 16621 Arranged "To Be Arranged"
Fall CHEM0360 S01 16619 MWF 9:00-9:50(01) "To Be Arranged"
Fall CHEM0360 S02 16620 TTh 9:00-10:20(08) "To Be Arranged"

CHEM 0500. Inorganic Chemistry.
Examines the chemistry of main group and transition metal elements with treatment of covalent bonding and molecular structure along with the methods of studying inorganic compounds and reactions. Three hours of lecture and five hours of prelaboratory and laboratory attendance. Prerequisite: CHEM 0360. Students MUST register for a lecture section and a lab. Spr CHEM0500 S01 25271 MWF 11:00-11:50(04) "To Be Arranged"

CHEM 0970. Undergraduate Research.
Prerequisite: permission of the staff. Permission should be requested before the end of the preceding semester. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. CHEM 0980. Undergraduate Research.
See Undergraduate Research (CHEM 0970) for course description. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

CHEM 1060. Advanced Inorganic Chemistry.
Covers the physical and chemical properties of transition metal compounds as well as current research topics in inorganic chemistry. Laboratory is designed for the practice of modern inorganic chemistry through the synthesis and spectroscopic characterization of air-sensitive transition metal compounds. Prerequisite: CHEM 0500. Fall CHEM1060 S01 16624 MWF 9:00-9:50(01) "To Be Arranged"

CHEM 1140. Physical Chemistry: Quantum Chemistry.
An introduction to the quantum theory of chemical systems. Elements of quantum mechanics; electronic structure of atoms and molecules; study of molecular structure and behavior by spectroscopy; chemical bonding are all explored. Prerequisites: CHEM 0330, MATH 0180 or equivalent, PHYS 0030 and PHYS 0040 or PHYS 0050 and PHYS 0060 or PHYS 0070 and PHYS 0470 or ENGR 0030 and ENGR 0040. Fall CHEM1140 S01 16626 MWF 10:00-10:50(14) "To Be Arranged"

Examines the question: Where does chemical equilibrium come from? Focuses on macroscopic perspectives on chemical systems and the molecular origins of macroscopic behavior along with elements of statistical mechanics, the laws of thermodynamics, and the relationships between the two. Prerequisite: CHEM 1140 or written permission of the instructor. Spr CHEM1150 S01 25274 MWF 10:00-10:50(03) "To Be Arranged"

CHEM 1160. Physical Chemistry Laboratory.
An introduction to modern instrumentation and experimental techniques as applied to physical chemistry. Experiments will emphasize application of the ideas of spectroscopy, kinetics, statistical mechanics, and thermodynamics to systems of chemical and biochemical interest. Required course for concentrators in chemistry. One to two afternoons of laboratory per week. Prerequisites: CHEM 1140 or permission of the instructor. Spr CHEM1160 S01 25275 MW 1:00-5:50 "To Be Arranged"

CHEM 1230. Chemical Biology.
This course covers topics at the interface of chemistry and biology and, specifically, the use of chemical tools to probe biological systems. Using examples from the recent literature, we will discuss using the central methods of chemistry, namely the ability to design and synthesize compounds with a particular set of properties, to analyze biological problems. Specific topics include molecular recognition of DNA, artificial enzymes, small molecule sensors, and in vivo imaging of proteins, nucleic acids, and cell-surface carbohydrates. Prerequisites: CHEM 0360 and BIOL 0280. If enrollment exceeds the limit, permission to enroll will be allotted in the order: 1) first year graduate students, 2) senior concentrators in Chemistry or Biochemistry 3) junior concentrators 4) other students. Students who have registered or have permission to enroll must attend the first three classes or risk losing their places to someone on the waiting list. Fall CHEM1230 S01 16627 MW 8:30-9:50(01) "To Be Arranged"

CHEM 1240. Biochemistry.
Examines the chemical, mechanistic, and structural basis for enzymatic catalysis. Uses examples from the recent literature to examine how the experimental and conceptual tools of chemical synthesis, isotopic labeling, stereochemistry, enzymology, kinetics, and protein structure can be brought to bear to unravel the chemical and physical principles underlying the enormous catalytic acceleration and exquisite structural specificity of enzyme-catalyzed reactions. Prerequisites: Strong background in organic chemistry (CHEM 0360, A or B performance preferable) plus at least one semester of Biochemistry (BIOL 0280). Enrollment limited to: 25 students, written permission required. Spr CHEM1240 S01 25276 TTh 9:00-10:20(01) "To Be Arranged"

CHEM 1450. Advanced Organic Chemistry.
Lectures cover topics of current interest in organic reaction mechanisms, synthesis, and structure determination. Laboratory emphasizes spectroscopic and separation techniques and modern synthetic methods. Prerequisite: CHEM 0360. Students MUST register for a lecture section, conference and a lab. WRIT Spr CHEM1450 S01 25277 MW 8:30-9:50(02) "To Be Arranged"

CHEM 1560G. Nuclear Magnetic Resonance.
These special topics courses cover the basics of modern NMR spectroscopy. Topics to be included are as follows: modern Fourier transform methodology, modern NMR instrumentation, and a comprehensive discussion of one and two dimensional experiments that are routinely performed. Topics such as coherence transfer and pulsed field gradients will also be included. Experimental methods covered in detail include COSY, TOCSY, HSQC, HMBC, NOSEY, ROEY, EXSY and DOSY methodology. This course will not focus on structure determination or spectral interpretation but rather on experimental methodology. Spr CHEM1560G S01 25280 MWF 10:00-10:50(03) "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CHEM 1560K. Computational Chemistry.
Introduction to computational tools for studying the structure of molecules, chemical bonding and chemical reactions. A survey of computational approaches for calculating electron distribution such as molecular mechanics, semi-empirical and ab initio methods (Hartree-Fock, configuration interaction, perturbation theory and density functional theory) will be given. Methods for calculating dynamics of atoms in molecular vibration and chemical reactions will be covered. The course is intended for seniors and graduate students in all subdivisions of chemistry. The goal is to make students capable of using research level tools and carry out simple calculations related to their research interests.

Fall CHEM1560K S01 25286 Arranged "To Be Arranged"

CHEM 1560N. Organometallic Chemistry.
This course intends to help students understand structures and reactions of transition metal complexes with common organic ligands: 18-electron rule; the structure and properties of transition metal complexes with carbonyl and other common organic ligands: chemical reactions initiated by metal-organic bonding interactions; and organometallic catalysis.
Prerequisites: CHEM 0360, CHEM 0500, CHEM 1060. PLEASE NOTE: This class is WRIT designated for Undergraduates Only. Graduate Students register for CHEM2310. WRIT

CHEM 1620C. Topics in Modern Physical Chemistry.
No description available.

Fall CHEM1620C S01 16636 Arranged "To Be Arranged"

Focuses on synthesis, properties, and applications of nanoscale materials. It begins with the introduction to size-dependent properties and to general characterization methods of nanomaterials. It then outlines the synthesis, surface chemistry and self-assembly of nanomaterials. It further reviews catalytic, optical and magnetic properties of nanomaterials. Finally, the course highlights the applications of nanomaterials in information storage, energy conversion, and biomedicine. Prerequisites: CHEM0350, PHYS 0030 or 0050, BIOL0280 recommended.

Fall CHEM1700 S01 16628 MWF 11:00-11:50(16) "To Be Arranged"

CHEM 2010. Advanced Thermodynamics.
Fundamental principles of macroscopic equilibrium thermodynamics. The three laws of thermodynamics, the thermodynamic potentials, temperature scales, heat engines and refrigerators, entropy, kinetic theory, and transport phenomena. Applications to solids, fluids, and magnetic systems; Gibbs relations, first and second order phase transitions, thermal radiation, gas expansions.

Fall CHEM2010 S01 16629 TTh 9:00-10:20(08) "To Be Arranged"

Introduction to modern equilibrium statistical mechanics, including the classical and quantum descriptions of ideal gases, the molecular basis of thermodynamics, the concepts of ensembles and fluctuations, and the implications of quantum mechanical indistinguishability. Applications include chemical and phase equilibria, the transition-state theory of chemical reaction rates, and the theory of liquids.

Spr CHEM2020 S01 25281 MWF 9:00-9:50(02) "To Be Arranged"

CHEM 2310. Organometallic Chemistry.
This course intends to help students understand structures and reactions of transition metal complexes with common organic ligands: 18-electron rule; the structure and properties of transition metal complexes with carbonyl and other common organic ligands: chemical reactions initiated by metal-organic bonding interactions; and organometallic catalysis.
Prerequisites: CHEM 0360, CHEM 0500, CHEM 1060.

Fall CHEM2310 S01 16630 TTh 10:30-11:50(13) (J. Robinson)

CHEM 2320. Solid State Chemistry.
This course focuses on descriptive understanding of structures and properties of inorganic materials. It covers symmetry operations in crystals, crystal structure, physical properties of inorganic materials, materials phase diagram and preparation, and solid state electrochemistry for battery, fuel cell and supercapacitor applications. Prerequisites: CHEM 0500 and 1060 or equivalents or written permission. Recommended for seniors and first-year graduate students.

Spr CHEM2320 S01 25282 TTh 10:30-11:50(09) "To Be Arranged"

Detailed examination of organic reaction mechanisms, reactive intermediates, and the methods employed for their characterization (e.g., kinetics, free energy relationships, isotope effects, molecular orbital theory, spectroscopy, and product distributions). Topics may include concerted, free radical, elimination, and photochemical reactions, and the chemistry of radicals, carboxyls, carbanions, and carbones.

Fall CHEM2410 S01 16631 TTh 9:00-10:20(08) "To Be Arranged"

CHEM 2420. Organic Reactions.
Study of organic reactions and reaction mechanisms. Discussion and analysis of organic transformations. Topics can include arrow pushing strategies and synthetic methods.

Fall CHEM2420 S01 16632 MWF 10:00-10:50(14) "To Be Arranged"

CHEM 2430. Synthetic Organic Chemistry.
Methods, strategies, and mechanisms. Topics may include the chemistry of anions, cations, and radicals, concerted reactions, conformational analysis, and stereochemistry.

Fall CHEM2430 S01 25283 F 1:00-3:00 "To Be Arranged"

CHEM 2770. Quantum Mechanics.
Semester I: Time independent quantum mechanics and its application to atomic and molecular problems. Discussions of modern theories of electronic structure, chemical bonding, and molecular spectroscopy. Prerequisite: CHEM 1140 or equivalent.

Fall CHEM2770 S01 16633 TTh 10:30-11:50(13) "To Be Arranged"

CHEM 2870. Departmental Colloquia.
No description available. Open to graduate students only.

Fall CHEM2870 S01 16634 F 4:00-5:20 "To Be Arranged"

CHEM 2980. Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

CHEM 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall CHEM2990 S01 14953 Arranged "To Be Arranged"

CHEM XLIST. Courses of Interest to Students wishing to Study Chemistry.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Classics

CLAS 0150. Ancient Philosophy.
Ancient Greek views about the prospects and limits of reason in the human being's search for a good and valuable life. What is the best life is; how, and how far, reason can provide for its realization; what social/ political conditions it requires; how vulnerable it is (and should be) to uncontrolled happenings. Authors include Euripides, Thucydides, Plato, Aristotle, Epicurus, Lucretius, Augustine, and Dante. WRIT
Fall CLAS0150 S01 15689 MWF 12:00-12:50(12) (M. Gall)

CLAS 0210O. Sport in the Ancient Greek World.
Athletics and sports were as popular and significant in the ancient Greek world as they are today, and so offer an excellent introduction to its archaeology and history. This course will discuss the development of Greek athletics, the nature of individual events, the social implications of athletic professionalism, women and athletics, and the role of sport in Greek education.
Fall CLAS0210CS01 15680 MWF 2:00-2:50(07) (J. Cherry)

CLAS 0210R. Revolutionary Classics (or, the classical origins of your Brown education).
When Brown University was founded in 1764 the curriculum was based on classical texts. In early America, the classics of Greek and Roman antiquity – read in the original Greek and Latin – were the foundation of a gentleman’s education. This course will explore early ideas and structures of higher learning in America from the springboard of those classical texts. We will read a sizable portion of Brown’s earliest curriculum (in English translation), but just as importantly we will seek to set that curriculum in the context of early American intellectual history, from roughly the Colonial to the Antebellum Period. WRIT
Spr CLAS0210RS01 24573 TTh 1:00-2:20(10) (J. Hanink)

CLAS 0400. Ancient Comedy and Its Influence.
This course examines the origins and developments of comedy in ancient Greece (early iambic poetry, Aristophanes, Menander), its later offshoots in Rome (Plautus, Terence), England (Shakespeare), and the continued influence these ancient forms have on comedy today. Secondary readings include ancient and modern thoughts on humor and laughter, and writings on the historical contexts in which these plays were produced. WRIT
Spr CLAS0400 S01 24561 TTh 10:30-11:50(09) (S. Kid)

CLAS 0600. The Literary Worlds of Late Antiquity.
We study the manifold literary forms championed in those centuries when Greco-Roman literature was transformed by social, spiritual, and creative forces perhaps unparalleled in the western tradition. Genres to be studied include: history (Gregory of Tours), consolation (Boethius), lyric (Ausonius and Fortunatus), hymnody (Prudentius), epic (Juvencus), apology (Tertullian), the philosophic dialogue (Augustine), the cento (Proba), among others. Close attention will be paid to contextualizing these authors and genres in the Greco-Roman tradition and in their late ancient configurations. WRIT
Fall CLAS0600 S01 15678 MWF 1:00-1:50(06) (J. Pucci)

CLAS 0620. Greek Tragedy.
An investigation of many of the surviving plays of the Greek tragedians Aeschylus, Sophocles, and Euripides. Considers the diverse aspects of ancient drama: the context, both religious and sociopolitical; issues of theatrical production, the poetic texture of the plays; and the influence of classical drama on later drama and western thought. Additional readings may include Aristophanes' Frogs and Thesmophoriazusae and selections from Aristotle's Poetics, the earliest criticism of Greek tragedy. WRIT
Fall CLAS0620 S01 15684 TTh 1:00-2:20(10) (J. Hanink)

CLAS 0660. The World of Byzantium.
Caught between the East and West, the culture of Byzantium inherited the ancient worlds of Greece, Rome, and Jerusalem, nurturing many a modern ideology, conflict, and identity. Byzantium is explored through its history, texts, and art. We examine the foundation and history of Constantinople, Iconoclasm, the Crusades, medieval Christianity and Islam, Byzantine court life, concepts of gender, self, and sexuality. WRIT
Spr CLAS0660 S01 24575 MWF 2:00-2:50(07) (E. Papaioannou)

CLAS 0995. India's Classical Performing Arts.
South Asia is home to rich classical traditions in the performing arts – drama, dance, music – which continue into the present. These performative traditions are accompanied by theoretical analyses going back to the Nāṭyaśāstra attributed to the sage Bharata, (2nd c. BCE-6th c. CE). This course introduces students to these traditions and theories to allow for an informed appreciation of South Asia's classical arts. This course will include reading classical texts in translation and experiencing, analyzing, and discussing recorded performances. The final portion of the course will examine the influence of the classical arts on Bollywood film. DPPI WRIT
Spr CLAS0995 S01 25383 TTh 1:00-2:20(10) (D. Buchta)

CLAS 1120B. Epic Poetry from Homer to Lucan.
Traces the rich history and manifold varieties of the genre of epic poetry in the literatures of ancient Greece and Rome beginning with Homer's Iliad and Odyssey (VII c. B.C.) and ending with Lucan's Civil War (I. c. A.D.). Masterpieces such as Virgil's Aeneid and Ovid's Metamorphoses are included. Original sources read in translation. WRIT
Fall CLAS1120B S01 15670 TTh 10:30-11:50(13) (P. Nieto Hernandez)

CLAS 1120T. Age of Augustus: Topography, Architecture, and Politics.
Augustus Caesar boasted that he had found Rome a city in brick, but left it in marble. This course explores the transformation of Rome from an unadorned village to the capital of an empire. Was Rome's first emperor trying to fashion himself a Hellenistic monarch on the model of Alexander and his successors? Was he simply operating within republican traditions, which had been established through centuries of aristocratic competition at Rome? Our source materials will include ancient works of art and architecture, literary accounts, maps, and critical urban theory.
Fall CLAS1120T S01 15673 MWF 11:00-11:50(16) (L. Migone)

CLAS 1120U. The American Presidents and the Western Tradition.
We are accustomed to engaging the American presidency as a public office best approached through the prism of government or political science, but this course studies the ways in which the presidents in thought and action are part of a larger continuum of humanistic expression in the western tradition. It is organized around five categories: memory, language, consolation, farewell, and self-reflection. Our work involves reading and viewing/listening to various materials, including videos and original documents. The words we study, both by and about presidents, will be compared to various masterworks of Greco-Roman antiquity and the western Middle Ages. WRIT
Spr CLAS1120U S01 24570 MWF 1:00-1:50(06) (J. Pucci)

CLAS 1120Y. Alexander to Cleopatra: Greek Literature and Culture.
The Classical Greek culture most familiar to us was codified and developed during the 300-year Hellenistic period, beginning with Alexander the Great and his successors, who turbocharged that culture with the wealth and energies of the ancient multithecnic empires they conquered, including Egypt and Persia. Greek becomes a medium for global aspirations and competing perspectives on the world; Rome inherited these visions of a hybrid, globalist culture and consciously translated them into one we still live with. This course studies the literature and thought of this period down to Cleopatra, the last Hellenistic monarch to fall to the Roman empire.
Fall CLAS1120Y S01 15847 MWF 1:00-1:50(06) (J. Reed)

CLAS 1140. Classical Philosophy of India.
This course introduces the classical traditions of philosophy in India. After presenting a general overview of this discourse and its basic Brahminic, Buddhist, and Jain branches, the course will examine selected traditions and themes from both the several schools concerned entirely with gaining ultimate beatitude (the Highest Good) (the schools known as Sāmkhya, Yoga, Theravada Buddhism, Mahāyāna Buddhism, Jainism, and Vedānta) and the schools that concentrate on issues of logic, metaphysics, and language and hermeneutics (Nyāya, Vaisheshika, and Pūrva Mimāṃsā, respectively). DPPI
Fall CLAS1140 S01 15685 TTh 1:00-2:20(10) (D. Buchta)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CLAS 1210. The History of Greece from Archaic Times to the Death of Alexander.
A detailed examination of the history of the Greeks-political, economic, and social-from Homer's time to the establishment of the Hellenistic monarchies by the successors of Alexander the Great. The ancient sources are closely and critically studied (in translation).
Fall CLAS1210 S01 15682 MWF 2:00-2:50(07) (G. Oliver)

CLAS 1410. Roman Religion.
Explores the religions of Rome, from the animism of King Numa to the triumph of Christianity. Topics include: concepts of religion and the sacred; sacred law; ritual space and the function of ritual; festivals; divination; magistrates and priests; the imperial cult; death and the afterlife; mystery cults; astrology and magic.
Fall CLAS1410 S01 15687 TTh 2:30-3:50(03) (J. Bodel)

CLAS 1750N. Marriage in the Ancient World.
Marriage is a historical phenomenon: it assumes various forms and has distinct meanings in different societies, even those that have been regarded as the fountainhead of Western values. This course (a seminar addressed in particular to upper-level undergraduates) investigates this important social institution in ancient Greece and Rome, using a variety of primary documents (literary, historical, epigraphical, etc.) and taking account of modern approaches to the study of marriage, including anthropological, sociological and psychological theories. All sources will be read in English.
WRIT Spr CLAS1750NS01 25384 MWF 9:00-9:50(02) (P. Nieto Hernandez)

CLAS 1750P. Staging the Law: Classical Literature and Renaissance Drama.
1) We examine theater and its relation to society, particularly, its reflection of legal culture (detentions of murderers, adulterers, and young lovers); we also examine law’s 'theatricality' ('productions' of trials). 2) We also explore more broadly how dramas were performed, using as comparanda Japanese Noh and Kabuki (in each, for example, we find all-male casting). 3) Attention is also directed toward twentieth century receptions of these plays; we focus largely on Japanese productions, particularly of Yukio Ninagawa, mastermind of Japanese theater who directed numerous Greek tragedies and Shakespearean plays in different venues, absorbing and subverting phenomena of traditional Japanese theater.
Spr CLAS1750PS01 24580 TTh 2:30-3:50(11) (A. Scafuro)

CLAS 1750S. Pompeii: Life and Death in the Shadow of Vesuvius.
On a late August(?) day in 79 CE, hot ash and lightning rained down on the cities southeast of Vesuvius for more than 12 hours before waves of rock and gases, traveling well over 100 mph, flattened everything in their path. The volcanic eruption was cataclysmic. Death was violent. Whole cities were engulfed, buried, and lost—until the mid-18th century. This course explores the daily life and sudden death of Pompeii and its residents. Topics may include decorative arts, housing, urban design and planning, water management, diet and physical health (using osteology), political life (using graffiti), religion, and urban prostitution.
Spr CLAS1750SS01 25111 M 3:00-5:00(18) (L. Mignone)

CLAS 1930C. Parasites and Hypocrites.
The course is a study of the many forms of toady, groveling, feigning friendship, flattery, ass-kissing, and so on, that were such a large source of concern — and comedy — in antiquity. The anxieties over hypocrisy in a democracy and parasites in client-patron systems will be explored historically, in literary representations, and in their social, political, and economic contexts. Authors to be read include Aristophanes, Plutarch, Lucian, Plautus, Horace, and Petronius.
Spr CLAS1930CS01 24577 TTh 2:30-3:50(18) (K. Haynes)

CLAS 1970. Special Topics.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Section numbers vary by instructor. Please check banner for the correct section number and CRN to use when registering for this course.

Introduction to standard research methods and tools in major subdisciplines of classical philology and ancient history. Required of entering graduate students. Survey of various subdisciplines in order to become familiar with field and scholarly principles.
Fall CLAS2000 S01 15666 TTh 9:00-10:20(08) (J. Debrehun)

CLAS 2080F. The Age of Tiberius.
This course investigates the political, social, and literary culture of the twenty-three-year period that constituted the Principate of Tiberius, the second Roman emperor. Marked by unprecedented social upheaval and conventionally characterized as a time of literary and political retrenchment, the era has been undervalued and understudied, despite a wealth of relevant new documentary evidence and recent re-assessment of several literary works of the immediate post-Augustan age. This course aims to serve both classicists and ancient historians by integrating literary and historical study through weekly readings in both documentary and literary sources.
Fall CLAS2080FS01 16492 M 3:00-5:30(15) (J. Bodel)

CLAS 2080G. Hellenistic Athens: A Post-Imperial City of Culture in a Changing World.
This research seminar is focused on three themes: political, socio-economic, and cultural history. The course assumes no knowledge of ancient Greek but documents in the original language will complement other translated materials. We will explore Athenian history from the Lamian war to Augustus, making use of the recent and forthcoming epigraphical material in the IG series. Other topics include: the city’s educational and cultural role, relations with Delos, with Rome, with Hellenistic Kings, women, foreigners, cult, institutions, governance. Students will present material in the weekly classes and work towards a research paper for the final assignment.
Spr CLAS2080GS01 25092 W 3:00-5:30(14) (G. Oliver)

CLAS 2450. Exchange Scholar Program.

CLAS 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall CLAS2970 S01 14956 Arranged 'To Be Arranged'
Spr CLAS2970 S01 23986 Arranged 'To Be Arranged'

CLAS 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor permission required.

CLAS 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall CLAS2990 S01 14957 Arranged 'To Be Arranged'
Spr CLAS2990 S01 23987 Arranged 'To Be Arranged'

CLAS XLIST. Courses of Interest to Classics Concentrators.

Greek

GREK 0100. Essentials of the Greek Language.
A two-semester approach to ancient Greek with special emphasis on developing facility in rapid reading of Greek literature. Selections from Attic Greek authors. No previous knowledge of Greek is required.
Fall GREK0100 S01 15674 Th 12:00-12:50(16) (S. Kidd)
Fall GREK0100 S01 15674 MWF 11:00-11:50(16) (S. Kidd)

GREK 0110. Introduction to Ancient Greek.
Intensive, one-semester introduction to Greek. No previous knowledge of Greek is required.
Spr GREK0110 S01 24571 MWF 1:00-1:50(06) 'To Be Arranged'
Spr GREK0110 S01 24571 TTh 12:00-12:50(06) 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
GREK 0200. Essentials of the Greek Language.
Second half of a two-semester approach to ancient Greek with special emphasis on developing facility in rapid reading of Greek literature. Selections from Attic Greek authors. No previous knowledge of Greek is required.
Spr GREK0200 S01 24563 Th 12:00-12:50(04) ‘To Be Arranged’
Spr GREK0200 S02 24563 MWF 11:00-11:50(04) ‘To Be Arranged’

GREK 0300. Introduction to Greek Literature.
Introduction to Greek literature through intensive reading. Prerequisite: GREK 0200, GREK 0110, or the equivalent. This course focuses on translation and comprehension of Classical Greek prose. The goal is to expand your vocabulary, increase your ease with morphology, and deepen your understanding of syntax as each of these elements of the language interact with each other. The primary text will be Plato’s Symposium, in which Socrates and other guests at a drinking party consider the nature of love, ἔρως and its role in personal relationships, education, and even politics.
Fall GREK0300 S01 15668 MWF 10:00-10:50(14) ‘To Be Arranged’

GREK 0400. Introduction to Greek Literature.
Prerequisite: GREK 0300 (or the equivalent). Review of grammar of the Attic dialect through rapid reading of texts by Lysias, Plato, or Xenophon. Emphasis on syntax and style.
Spr GREK0400 S01 24558 MWF 10:00-10:50(03) ‘To Be Arranged’

GREK 1050G. Greek Drama.
Introduction to the study of Athenian drama. Thorough translation of one or two tragedies of Euripides; if time permits, a comedy of Menander (who was much influenced by Euripides) will be added for comparison.
Fall GREK1050C S01 15827 TTh 10:30-11:50(13) (A. Scavo)

GREK 1060. Herodotus.
How do we read Herodotus’ Histories in today’s post-truth era? Once known as part of the “Liar School”, today’s ‘Father of History’ is better understood as a commentator on cultural difference, an artful story teller, and an astute observer of historical methods. This course focuses on Herodotus Book VIII which retells the critical naval conflicts between the Greeks and Persia at Artemision and Salamis in 480 BCE. The depictions of Xerxes and Themistokles serve as an appetizer for the “debate” where Herodotus evokes Panhellenism and Greece’s debt to Athens. This Advanced Greek course is suitable for Undergraduates and Graduates.
Fall GREK1060 S01 15796 MWF 10:00-10:50(14) (G. Oliver)

GREK 1080. Attic Orators.
No description available.
Spr GREK1080 S01 24630 TTh 10:30-11:50(09) (A. Scavo)

GREK 1100. Advanced Homer: The Odyssey.
It is hard to imagine a more joyful way to acquire excellent control of Homeric Greek than by reading, in its entirety (if possible), Homer’s wonderful and captivating work, the Odyssey. Though it can be a little time-consuming initially, students quickly become familiar with the syntax and the vocabulary, and find great pleasure in immersing themselves in this thrilling masterpiece.
Spr GREK1100 S01 24566 MWF 11:00-11:50(04) (P. Nieto Hernandez)

GREK 1100G. On the Sublime.
What makes great writing great? We will explore this question with the author of “On the Sublime” a treatise thought to be from the first century CE and usually attached to the name “Longinus”. Sappho, Homer, Plato and many others are invited into the discussion as we try to define the power (and occasional shortcomings) of the works they’ve left behind.
Spr GREK1100C S01 24691 TTh 1:00-2:20(10) (S. Kidd)

GREK 1110D. Plato: Symposium.
Readings in Greek Plato’s Symposium, his beautiful dialogue about love and philosophy.
Spr GREK1110D S01 24579 TTh 2:30-3:50(11) (M. Gill)

GREK 1140. Introduction to Greek Linguistics.
Examines changes that took place in Greek from the time of its separation from its parent language (Proto-Indo-European) to the dialects of Classical times (5th-4th C.B.C.). This course is also an introduction to the methodology of historical linguistics, concentrating on phonology. Proficiency in ancient Greek is required.
Fall GREK1140 S01 15666 TTh 1:00-2:20(10) (P. Nieto Hernandez)

GREK 1820. Fifth Century Survey.
We begin with Pindar and read poetry and prose literature composed throughout the fifth century, with attention to its historical development styles, and the intellectual ideas that drive it.
Fall GREK1820 S01 15679 MWF 1:00-1:50(06) (S. Kidd)

GREK 1910. Special Topics.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

GREK 2100F. The Twilight of Classical Athens.
Why did Athens fall to Macedon? How did the citizens prepare—and when and how did they know that their city’s ‘miracle’ was over? In this seminar we will explore Athenian cultural production—inscriptions, speeches, poetic fragments, material culture, etc.—from the second half of the fourth century CE, guided by an interest in tracing the city’s anticipation and experience of the last days of its celebrated democracy. We will read major works by Isocrates, Demosthenes, Aeschines, Lycurgus and Hyperides, explore current trends in scholarship on this period, and consider the material’s relevance for today.
Fall GREK2100F S01 16399 W 3:00-5:30(17) (J. Hanink)

GREK 2150. Plato’s Theaetetus.
See PHIL 2150I for course description.
Fall GREK2150 S01 15683 Th 4:00-6:30(04) (M. Gill)

GREK 2970. Preliminary Exam Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall GREK2970 S01 14982 Arranged ‘To Be Arranged’
Spr GREK2970 S01 24009 Arranged ‘To Be Arranged’

GREK 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor permission required.

GREK 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall GREK2990 S01 14983 Arranged ‘To Be Arranged’
Spr GREK2990 S01 24010 Arranged ‘To Be Arranged’

Latin

LATN 0100. Essentials of the Latin Language.
An intensive two-semester approach to Latin with special emphasis on developing facility in the rapid reading of Latin literature. No previous knowledge of Latin is required.
Fall LATN0100 S01 15669 Th 12:00-12:50(14) (J. Reed)
Fall LATN0100 S01 15669 MWF 10:00-10:50(14) (J. Reed)

LATN 0110. Introduction to Latin.
Intensive, one-semester introduction to Latin. No previous knowledge of Latin is required.
Spr LATN0110 S01 24554 TTh 12:00-12:50(02) ‘To Be Arranged’
Spr LATN0110 S01 24554 MWF 9:00-9:50(02) ‘To Be Arranged’
LATN 0200. Essentials of the Latin Language.
Second course in an intensive two-semester approach to Latin. Special emphasis on developing facility in the rapid reading of Latin literature. No previous knowledge of Latin is required prior to taking this two course sequence.
Spr LATN0200 S01 24559 Th 12:00-12:50(03) 'To Be Arranged'
Spr LATN0200 S01 24559 MWF 10:00-10:50(03) 'To Be Arranged'

LATN 0300. Introduction to Latin Literature.
Introduction to Latin literature through intensive reading of major authors in prose and poetry with careful attention to grammar and style. Prerequisite: LATN 0100, 0200 or 0110 (or equivalent).
Fall LATN0300 S01 15683 MWF 9:00-9:50(01) 'To Be Arranged'

LATN 0400. Introduction to Latin Literature.
Introduction to Latin literature through intensive reading of major authors in prose and poetry with careful attention to grammar and style. Prerequisite: LATN 0100, 0200 or 0110 (or equivalent).
Spr LATN0400 S01 24555 MWF 9:00-9:50(02) 'To Be Arranged'

LATN 1015. Horace's Odes.
This course covers Horace's four books of lyric poetry in the original Latin, with attention paid to linguistic and literary details as well as to the poetry's place in the history of Greek and Roman literature and in Roman political and social culture at the moment of transition from Republic to Empire.
Spr LATN1015 S01 24651 MWF 2:00-2:50(07) (J. Reed)

LATN 1100E. Comedy.
No description available.
Fall LATN1100E S01 15688 TTh 2:30-3:50(03) (A. Scafuro)

LATN 1110G. Latin Love Elegy.
Reading of representative selections from each of the Roman elegists: Tibullus, Propertius, and Ovid. Discussion also of the origins and development of love elegy at Rome and exploration of the themes and topoi that define the genre. Follows the poets' negotiations with various discourses and ideologies in Augustan Rome: literary, social, sexual, and political.
Fall LATN1110G S01 15672 TTh 10:30-11:50(13) (J. Pucci)

LATN 1110L. Medieval Latin Lyric.
Close reading of a representative sampling of the personal poetry of the Latin Middle Ages, paying attention to what constitutes the lyric mode in the fourth through the twelfth centuries, developments in metrics, the effects of Christianity on vision and voice, the pressures of vernacular traditions, lyric rhetoric.
Fall LATN1110L S01 15723 MWF 11:00-11:50(16) (J. Pucci)

LATN 1110Y. Latin Epistolography (Cicero, Pliny).
The personal correspondences of Cicero and of Pliny the Younger offer insight into the social and political workings of Rome in two critical periods: the final decades of the Republic and the decades just before the Empire reached its greatest extent. Selections from Cicero, composed for a private audience, expose the statesman's inner hopes and anxieties regarding his family, his friends, and his state. Selections from Pliny, self-consciously published by the author himself, not only recount exciting moments in Roman history (such as the early persecution of Christians and Vesuvius' eruption), but also play with the very genre of epistolography.
Spr LATN1110Y S01 25070 TTh 10:30-11:50(09) (L. Mignone)

LATN 1120D. Alcuin.
Alcuin lived a life of wide variety and accomplishment, not least as an important member of Charlemagne's inner circle and, like many at court, he wrote widely and in multiple genres. From his enormous output this course will focus on the large collections of poetry and letters. We will attend in both gatherings to theme, tone, style, and allusiveness and, where appropriate, we will ponder alternate readings in a collection that has not been edited since the late nineteenth century.
Spr LATN1120D S01 24567 MWF 11:00-11:50(04) (J. Pucci)

LATN 1150. Latin Prose Composition.
Review of the basic tenets of Latin syntax, composition, and style. English to Latin translation exercises will shore up composition skills, as we study the stylistic traits of seven Roman authors: Cato, Caesar, Cicero, Sallust, Livy, Seneca, and Tacitus. The course will proceed chronologically according to author. Class time will be spent on translation exercises and review, as well as the identification of the stylistic and syntactic characteristics of the seven authors under study.
Fall LATN1150 S01 15664 MWF 9:00-9:50(01) (L. Mignone)

LATN 1810. Survey of Republican Literature.
Our purposes in this survey of Latin literature are to acquire a comprehensive historical perspective on Latin poetry and prose until the end of the Republic and a sense of its phases and the dynamics of its tradition; and to read different styles of Latin poetry and prose with confidence and ease.
Spr LATN1810 S01 24560 MWF 10:00-10:50(03) (J. Debrohun)

LATN 1970. Special Topics.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

LATN 2970. Preliminary Exam Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall LATN2970 S01 15000 Arranged 'To Be Arranged'
Spr LATN2970 S01 24025 Arranged 'To Be Arranged'

LATN 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.
Instructor permission required.

LATN 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall LATN2990 S01 15001 Arranged 'To Be Arranged'
Spr LATN2990 S01 24026 Arranged 'To Be Arranged'

Modern Greek

MGRK 0100. Introduction to Modern Greek.
Designed for students with little or no prior knowledge of Modern Greek. The aim is to introduce students to basic linguistic structures and develop the ability to comprehend and produce text, as well as to speak and understand speech, in a variety of contexts and registers. The course objectives are to enable students to perform a range of tasks, master a minimum core vocabulary and acquire knowledge and understanding of various forms of Greek culture.
Fall MGRK0100 S01 15675 MTWTh 12:00-12:50 (E. Amanatidou)

MGRK 0200. Introduction to Modern Greek.
A continuation of MGRK 0100. New students may place into it, after special arrangement with the instructor. The course continues on an integrative skills approach and aims to develop language skills, within a framework of specific topics and functions. The course objectives are to enable students to perform a range of tasks, master a minimum core vocabulary and acquire knowledge and understanding of various forms of Greek culture.
Spr MGRK0200 S01 24568 MTWTh 12:00-12:50 (E. Amanatidou)

MGRK 0300. Intermediate Modern Greek.
Develops linguistic and cultural competence and may be taken by anyone who has completed MGRK 0200 or after consultation with the instructor and/or a placement exam. It focuses on further development of the four language skills as well as knowledge and understanding of various aspects of Greek society. It employs a variety of materials, including film, digital stories, internet based sources, music, art, and literature.
Fall MGRK0300 S01 15667 TTh 9:00-10:20(08) (E. Amanatidou)
MALR 400. Intermediate Modern Greek.
A continuation of MALR 300. New students may place into it, after special arrangement with the instructor. It aims to enhance language skills within a variety of registers and themes; enable the students to master, use and understand effectively essential linguistic structures; examine a variety of expressive forms within an authentic cultural context.

Spr MALR0400 S01 24557 TTh 9:00-10:20(01) (E. Amanatidou)

MALR 5000. Advanced Modern Greek.
May be taken by students who have completed the previous sequences or by anyone who places successfully into the course. The course places emphasis on the improvement of writing and oral skills, via presentations, collaborative projects, conversations and assignments based on topics and texts, drawn from a variety of sources and cultural forms of expression.

Fall MALR0500 S01 15728 Arranged (E. Amanatidou)

MALR 1910. Special Topics in Modern Greek.
No description available.

Sanskrit

SANS 0100. Elementary Sanskrit I.
This course introduces Sanskrit to students who have no prior knowledge of any language other than English. Students quickly learn to read the Devanāgarī script and study the basics of the sound-system of Sanskrit. The course rapidly surveys the basics of Sanskrit grammar while using adaptations of classical Indian myths and stories as reading exercises.

Fall SANS0100 S01 15676 MTHF 12:00-12:50 (D. Buchta)

SANS 0200. Elementary Sanskrit II.
This course continues the survey of grammar and the reading exercises of SANS 100. The second half of this course reads selected passages of the Bhagavad Gītā and the beginning of the classic story of Nala and Damayanti from the Mahābhārata. Prerequisite: SANS 0100.

Spr SANS0200 S01 24569 MTHF 12:00-12:50 (D. Buchta)

SANS 0300. Sanskrit Epic Narrative.
Consolidates and extends the knowledge of Sanskrit grammar introduced in first year Sanskrit; acquaints students first-hand with basic themes of ancient Indian culture, and cultivates the reading and interpretive skills necessary to read epic and closely related Sanskrit narrative with comprehension and increased fluency. Prerequisite: SANS 0200.

Fall SANS0300 S01 15727 Arranged (D. Buchta)

SANS 0400. Classical Sanskrit Story Literature.
Introduces students to the more challenging Sanskrit of classical story literature and continues to extend the knowledge of Sanskrit grammar introduced in first year Sanskrit and developed in SANS 0300, as well as present basic Indian cultural themes. Prerequisite: SANS 0300.

Spr SANS0400 S01 24572 Arranged (D. Buchta)

SANS 1020. Early Sanskrit Philosophy and Religion.
Reading in Sanskrit of selections from the Upanishads, Bhagavad Gītā, Dharmasāstras, etc. Prerequisite: SANS 0200.

Fall SANS1020 S01 15665 MWF 9:00-9:50(01) (J. Fitzgerald)

SANS 1100. Vedic Sanskrit.
Introduction to reading the Rig Veda and later Vedic literature, with particular attention to the grammar of Vedic Sanskrit.

Spr SANS1100 S01 24562 TTh 10:30-11:50(09) (J. Fitzgerald)


Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Instructor's permission required.

SANS 2970. Sanskrit Preliminary Exam Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall SANS2970 S01 15032 Arranged "To Be Arranged"
Spr SANS2970 S01 24049 Arranged "To Be Arranged"

SANS 2980. Sanskrit Reading and Research.
Section numbers will vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Instructor permission required.

Cognitive, Linguistic and Psychological Sciences

Cognitive, Linguistic and Psychological Sciences

This course will provide an interdisciplinary approach to the science of the mind through lens of psychology, cognitive science, cognitive neuroscience, behavioral neuroscience, computational modeling and linguistics, as uniquely represented by our department. It will focus on questions that drive the field, current state-of-the-art, and successful techniques and approaches. Questions addressed will include: What is the nature of the human mind? How do we get input from the world? How do we communicate? How do we change as infants and adults through experience? How do we make decisions and judgments? How do minds meet other minds in a social world?

Fall CLPS0010 S01 16398 MWF 1:00-1:50(06) (E. Festa)

CLPS 0050A. Computing as Done in Brains and Computers.
Brains and computers compute in different ways. We will discuss the software and hardware of brains and computers and with introduction to the way brains are organized, the way computers are organized, and why they are good at such different things. We will talk about our current research, the Ersatz Brain Project, an attempt to design a first-class second-class brain. Enrollment limited to 15 first year students. FYS

Fall CLPS0050A S02 16233 MWF 11:00-11:50(16) (J. Anderson)

CLPS 0050J. Psychology of Creativity.
This course is a first year seminar intended to introduce students to the lively world of creativity and the science thereof. Classic and contemporary readings will be discussed covering topics ranging from theory and assessment to applications in education, product design, organizational behavior, the arts, and science itself. Students will also be nudged to become more mindful of the role of creativity in their everyday lives. The course will emphasize class discussion and the production of tangible projects. Enrollment limited to 20 first year students. FYS

Spr CLPS0050J S01 24933 MWF 9:00-9:50(02) (J. Krueger)

CLPS 0050L. Anthropogenic Activity + Animals.
Human activities that affect animals and their habitats are both widespread and increasing with largely negative impacts. In this first year seminar, we will examine the effects of anthropogenic disturbances on animal behavior through reading and discussion of scientific papers and conversations with expert guests. Topics include anthropogenic feeding on wildlife; noise, light and chemical pollution on aquatic and terrestrial species; recreational land and water use; technological modernization along migration routes; deforestation, hunting, and poaching. Students conduct an independent examination of environmental disturbances on a species from their country of origin or one with special personal relevance. Limited to first years. FYS WRIT

Fall CLPS0050L S01 16156 TTh 1:00-2:20(10) (R. Colwill)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CLPS 0050M. Playing with Words: The Linguistic Principles Behind Word Games and Puzzles.
In this course, we explore the use of language in a domain which is fairly unlike ordinary communication: the use of language in wordplay, alternate languages, games, and puzzles. At one level, understanding aspects of linguistic theory can provide insight into the internal workings of these various forms of wordplay. On another level, wordplay and puzzles often intentionally subvert the grammar and other rules of ordinary language use and therefore can provide a unique lens into typically implicit grammatical knowledge speakers possess and deploy in all domains of language. FYS
Spr CLPS0050M/S01 24931 MWF 12:00-12:50(05) (S. AnderBois)

CLPS 0100. Learning and Conditioning.
Presents classical and contemporary approaches to the study of the prediction and control of behavior. Emphasizes theories and data derived from studies of Pavlovian conditioning and instrumental learning with nonhuman animals, but also considers implications for human behavior (e.g., drug-dependent behaviors, eating disorders, behavior modification and psychopathologies). No prerequisites.
Spr CLPS0100 S01 24932 MWF 1:00-1:50(06) (R. Colwill)

CLPS 0120. Introduction to Sleep.
Uses sleep as the focal point for describing complex behavioral phenomena. How is sleep measured and defined? How does sleep differ across species? What accounts for the timing of sleep? How does sleep change with age? What are the behavioral, physiological, and cognitive concomitants of different states of sleep? How can dreaming be understood? What can go wrong with sleep? Recommended prerequisite: CLPS 0010, CLPS 0020 or NEUR 0010; or an AP course in psychology or physiology.
Fall CLPS0120 S01 16157 M 3:00-5:30(15) (M. Carskadon)

CLPS 0200. Human Cognition.
Introduction to theoretical issues and empirical findings motivating controversies in human cognition. Basic issues in cognition - including attention, memory, categorization, reasoning, decision making and problem solving will be examined. Emphasis will be on experimental methods and formal theories.
Spr CLPS0200 S01 24935 TTh 2:30-3:50(11) 'To Be Arranged'

CLPS 0220. Making Decisions.
Life is full of decisions. Some decisions are made rationally, others could be improved. This course considers the psychology of human decision-making, the analysis of optimal decision-making, and implications for individual action and social policy. Topics include: chance and preference (e.g., how do consumers weigh attributes when making purchases?); the value of information (e.g., when should physicians order expensive diagnostic tests?); risky choice (e.g., is it rational to play the lottery?).
Fall CLPS0220 S01 16158 TTh 10:30-11:50(13) (S. Slioman)

CLPS 0300. Introduction to Linguistics.
The ability to speak and understand a language involves having mastered (quite unconsciously) an intricate and highly structured rule-governed system. Linguists seek to model that rule system. This course introduces the principles underlying phonology (the principles that govern how sounds are put together), syntax (the rule system governing sentence structure), and semantics (the system that relates sentences to meanings).
Fall CLPS0300 S01 16704 TTh 1:00-2:20(10) (U. Cohen Privia)

CLPS 0400. Cognitive Neuroscience.
This course provides an introduction to the neuroscientific study of cognition. Topics surveyed in the course include the neural bases of perception, attention, memory, language, executive function, emotion, social cognition, and decision making. In covering these topics, the course will draw on evidence from brain imaging (fMRI, EEG, MEG), transcranial magnetic stimulation, electrophysiology, and neuropsychology. The course will also consider how knowledge about the brain constrains our understanding of the mind.
Spr CLPS0400 S01 25337 MWF 10:00-10:50(03) (D. Badre)

CLPS 0500. Perception and Mind.
How do the mind and the brain take physical energy such as light or sound and convert it into our perception of the world? This course examines the behavioral and biological bases of human and animal perceptual systems, including vision, audition, smell, taste, and touch. Particular emphasis is placed on high-level perception and how it relates to other cognitive systems.
Fall CLPS0500 S01 16159 TTh 9:00-10:20(08) (J. Song)

This course will focus on consciousness related to visual perception, attention, memory, and cognitive control. The learning goal is to understand the neural correlates of consciousness, with an emphasis on visual consciousness. We will examine 1) basic neural mechanisms of perceptual and cognitive processing; 2) philosophical and neuroscientific models of consciousness; 3) the interaction between attention, reward, and memory and visual consciousness; 4) recent advances in research of consciousness by neuroscientists with animals and humans.
Fall CLPS0550 S02 16703 MWF 2:00-2:50(07) (T. Watanabe)

CLPS 0600. Developmental Psychology.
Children's behavior and development from infancy through adolescence. Major topics include learning, perception, parent-child attachment, language, intelligence, motivation, emotional development, and peer relations. Major developmental theories, including psychoanalytic, ethological, social learning, and cognitive, are considered as organizers of these phenomena and as a source of testable hypotheses.
Spr CLPS0600 S01 25447 TTh 9:00-10:20(01) (D. Amso)

An examination of children's thinking and cognitive development from infancy to middle childhood. Considers a range of topics including memory, reasoning, categorization, perception, and children's understanding of concepts such as space, time, number, mind, and biology. Major theories of cognitive development are described and evaluated in light of the available psychological data.
Fall CLPS0610 S01 16160 MWF 10:00-10:50(14) (D. Sobel)

CLPS 0620. Social and Moral Development.
This course examines children's social and moral development from infancy to adolescence. There are no prerequisites. The course is designed for students anywhere from their first to their final semester at Brown. Some of the topics we will consider are children's social cognition, moral reasoning, attachment, parenting styles and parent-child interaction, temperament, and the role of culture and SES in development. We will evaluate theories of social and moral development in light of the available psychological data. We will also integrate behavioral work with issues in developmental cognitive neuroscience.
Spr CLPS0620 S01 25904 TTh 10:30-11:50(09) (D. Sobel)

CLPS 0700. Social Psychology.
Examines the theories, findings, and methods of social psychology. Topics include: social cognition (person perception, attitudes), social influence (cultural sources of attitudes, conformity), and social relations (aggression, altruism, prejudice). Students become better informed consumers of empirical research and acquire a new framework for interpreting social behavior. Applications to historic and current events.
Fall CLPS0700 S01 16161 TTh 2:30-3:50(03) (B. Malle)

CLPS 0701. Personality.
A survey of the major perspectives (psychoanalytic, behavioral, humanistic, etc.) within theories of personality. Particular emphasis is placed on the integration of research and theory.
Fall CLPS0701 S01 16162 TTh 9:00-10:20(08) (B. Hayden)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Course Descriptions

CLPS 0800. Language and the Mind.
Explores fundamental issues in psycholinguistics: what is the nature of language; what are its biological underpinnings; how does the mind process speech, recognize words, parse sentences, comprehend discourse; what do effects of brain injuries on language reveal about the organization of language in the mind? Syntheses of results from multiple modes of analysis – linguistic, psychological, computational, and neurophysiological – are emphasized.

Spr CLPS0800 S01 24936 MWF 2:00-2:50(07) (J. Morgan)

CLPS 0900. Statistical Methods.
A survey of statistical methods used in the behavioral sciences. Topics include graphical data description, probability theory, confidence intervals, principles of hypothesis testing, analysis of variance, correlation, and regression, and techniques for categorical data. Emphasizes application of statistical methods to empirical data.

Fall CLPS0900 S01 16163 TTh 10:30-11:50(13) (K. Spoehr)
Spr CLPS0900 S01 24937 MWF 11:00-11:50(04) (J. Wright)

CLPS 0950. Introduction to programming.
This course will provide an introduction to Matlab programming for students in the life sciences with no prior programming experience. At the end of the course, students will be able to implement Matlab functions independently to solve many common programming challenges associated with the study of the mind, brain and behavior — from conducting sophisticated data analyses to parsing complex data files to implementing psychophysics experiments. The course is designed for students in psychology, cognitive science, neuroscience and other non-computer science majors interested in learning Matlab. Beyond teaching specific coding skills, this course will support students’ development as computational thinkers.

Fall CLPS0950 S01 16700 TTh 2:30-3:50(03) (T. Serre)

CLPS 1130. Psychology of Timing.
Topics include temporal perception, memory, and preferences; cognitive, biological, and quantitative theories of timing; psychological influences on time perception and timed performance; altered timing in abnormal states; and timing in sports and music. Enrollment limited to 20.

Fall CLPS1130 S01 16234 MW 8:30-9:50(01) (R. Church)

CLPS 1150. Memory and the Brain.
This class is for undergraduate and beginning graduate students of psychology, cognitive neuroscience, and biology interested in to biological research on memory. There are four parts: 1) how neurons are connected and communicate, 2) fundamental issues in the psychology of memory, 3) memory localization in the brain, and 4) consolidation of memory into a permanent store. The course is designed to be accessible to students in a variety of disciplines, but requires background in psychology, cognitive science, or neuroscience. The class will include lecture, writing assignments, and presentations of primary research articles. Prerequisite: CLPS 0010, 0020, 0040, 0200, or NEUR 0010.

Fall CLPS1150 S01 16152 TTh 1:00-2:20(10) (R. Burnwell)

CLPS 1160. Evolution and Development of the Brain.
What is unique about the human brain? In this course, we will investigate this question from an evolutionary, comparative perspective. Drawing upon research from many disciplines including psychology, neuroethology, cognitive science, biology, biological anthropology, and neuroscience, we will identify changes in the nervous system that have occurred over phylogeny and over ontogeny to allow the development of complex social behaviors, cognition, language, and consciousness.

Spr CLPS1160 S01 25002 TTh 1:00-2:20(10) (A. Simmons)

CLPS 1191. Animal Behavior Laboratory.
This course is designed for students with a serious interest in animal behavior research. Topics include methods in lab and field research, enrichment programs for captive species and conditioning procedures for managing zoo and shelter animals. Prerequisites: CLPS 0900 (COGS/PSYC 0090). Enrollment limited to 12; not open to first-year students.

Fall CLPS1191 S01 16168 M 1:00-1:50 (R. Colwell)

CLPS 1192. Experimental Analysis of Animal Behavior and Cognition. A laboratory course on the prediction, control, and explanation of the behavior of animals in simple environments. Prerequisite: CLPS 0900 (PSYC/COGS 0090).

Spr CLPS1192 S01 24986 TTh 9:00-10:20(01) (R. Church)

CLPS 1193. Laboratory in Genes and Behavior.
Laboratory course in behavioral neuroscience designed to provide research experience in assessing effects of genetic alterations on behavior. Students examine the behavioral phenotype of a mouse model of human disease. Mice are tested on behavioral batteries to assess, for example cognitive, affective, and sensorimotor behavior. Recent classes tested models of early life stress, Fragile X Mental Retardation, and Alzheimer's Disease. Students will test the mice, analyze the data, and prepare a manuscript suitable for publication in a scientific journal. Prerequisites: CLPS 0410 or NEUR 0010, and CLPS 0900 or instructor permission. Enrollment limited to 10; not open to first-year students. WRIT

Spr CLPS1193 S01 24940 TTh 3:00-5:50 (K. Bath)

CLPS 1250. Human Factors.
The application of knowledge of human characteristics to the design of equipment, facilities, and environments for human use. Research on attention, perception, learning, and decision making will be applied to problems in various areas including: aviation, highway safety, industrial safety, consumer products, human-computer interaction, and aging. Enrollment limited to 25.

Spr CLPS1250 S01 24941 MWF 2:00-2:50(07) (K. Spoehr)

Most university students believe they are good learners, and most professors believe they teach well, yet the strategies each group employs are often the ones found to be least effective when examined from a scientific standpoint. This seminar examines what the basic scientific research in human cognition, as well as some well-designed applied studies, tell us about effective teaching and learning inside and outside of the classroom. Emphasis will be on high-school and college learners and teachers, but with some extensions to K-8. Pre Requisites: At least one CLPS course at the 1000-level or above or permission of the instructor.

Spr CLPS1271 S01 26526 M 3:00-5:30(13) (K. Spoehr)

CLPS 1291. Computational Methods for Mind, Brain and Behavior.
Provides an introduction to computational modeling of cognition, summarizing traditional approaches and providing experience with state-of-the-art methods. Covers pattern recognition and connectionist networks as well as Bayesian probabilistic models, and illustrates how they have been applied in several key areas in cognitive science, including visual perception and attention, object and face recognition, learning and memory as well as decision-making and reasoning. Focuses on modeling simple laboratory tasks from cognitive psychology. Connections to contemporary research will be emphasized highlighting how computational models may motivate the development of new hypothesis for experiment design in cognitive psychology. Prerequisite: comfort with basic linear algebra.

Spr CLPS1291 S01 25001 TTh 2:30-3:50(11) (T. Serre)

CLPS 1310. Introduction to Phonological Theory.
Examines some of the classic and current issues regarding sound structure in the world’s languages and introduces the theoretical tools needed to solve them. After an introduction to articulatory phonetics and phonemic analysis, it focuses on phonological analysis of different languages, and discusses rule-based and constraint-based approaches to phonology. Implications for language learning and language change are discussed. Prerequisite: CLPS 0030.

Spr CLPS1310 S01 24943 TTh 10:30-11:50(09) (C. Sanker)

CLPS 1330. Introduction to Syntax.
An in-depth investigation of natural language syntax, an intricate yet highly organized human cognitive system. Focuses primarily on the syntax of English as a means of illustrating the structured nature of a grammatical system, but the broader question at issue is the nature of the rule system in natural language syntax. Prerequisite: CLPS 0030 (COGS 0410).

Spr CLPS1330 S01 16168 TTh 9:00-10:20(08) (P. Jacobson)
CLPS 1342. Formal Semantics.
Model-theoretic approaches to the study of the semantics of natural languages. Develops the tools necessary for an understanding of "classical" formal semantics (the lambda calculus, intensional logic; Montague's treatment of quantification, etc.); then applies these tools to the analysis of natural language semantics; and finally turns to recent developments in formal semantic theory. Prerequisite: some familiarity with syntax or semantics or basic set theory and logic. Spr CLPS1342 S01 24944 TTh 9:00-10:20(01) (P. Jacobson)

CLPS 1360. Introduction to Corpus Linguistics.
The study of Linguistics relies on language production data. Language corpora contain various sources of such data, often annotated to include additional information such as syntactic, semantic and phonological properties. Such databases often complement or even replace data sources used in other disciplines. This class aims to train students in the use of some of the tools that are commonly used to access and evaluate data in linguistic corpora. Prerequisite: CLPS 0030. Enrollment limited to 25.

CLPS 1365. Introduction to Historical Linguistics.
This course is a survey of the basic mechanisms of how languages change over time and of the methods used to reconstruct these developments. We examine phonological change, morphological change, syntactic change, and semantic change, as well as interactions between these types of changes. Students will learn about types of evidence in reconstruction of change and about theoretical models of change. We will cover language relationships and the methods of establishing familial groupings, and we will compare patterns due to familial descent, language contact, and borrowing. Examples will be drawn from a variety of languages, both ancient and modern. Spr CLPS1365 S01 24946 MWF 9:00-10:20(01) (U. Cohen Privva)

CLPS 1370. Introduction to Pragmatics.
Any time we utter a sentence in conversation, the perceived meaning of that sentence interacts with the discourse context in a rich variety of ways. On the one hand, aspects of a sentence's meaning are "filled in" or enriched by the prior conversation as well as non-linguistic context. On the other hand, utterances shape the future of the conversation in various ways too. This course is an introduction to the scientific study of such phenomena. Specific topics include: presupposition, implicature, speech acts, deixis, anaphora, (in)definiteness, and information structure. Fall CLPS1370 S01 16169 TTh 10:30-11:50(13) (S. AnderBois)

CLPS 1380. Laboratory in Phonetics.
This course is an introduction to phonetics, covering articulation, acoustics, and perception. Students will gain basic skills in experimental phonetics, focusing on instrumental analysis of speech and behavioral responses in listening tasks. The first unit will provide training in methods of acoustic analysis using phonetic software (Praat), as well as looking at the relationship between articulation and the resulting speech sounds. The second unit will look at physiological and cognitive aspects of speech perception. The final unit will cover a selection of advanced topics in phonetics, including connections between perception and production and issues in the interface of phonetics and phonology. Fall CLPS1380 S01 16696 TTh 6:40-8:00PM(05) (C. Sanker)

CLPS 1381D. Topics in Phonology: Lenition.
Consonant shortening, voicing, and deletion are just a few of many phonological processes that are considered to be lenition (softening, weakening) processes. But is lenition a valid category? What functional forces are capable of causing such a wide variety of different processes, and what do they have in common? In this class we will study and criticize the different meanings of the term lenition and discuss several functionally-motivated causes for lenition. Spr CLPS1381D S01 25126 Th 4:00-6:30(17) (U. Cohen Privva)

CLPS 1385. Topics in Language Acquisition: Language Acquisition and Cognitive Development.
What is the relationship between how we think and how we speak? This course explores the concurrent development of children's linguistic and cognitive abilities. Topics include the relationship between word meanings and concepts, the structure of the mental lexicon, pragmatic development, and the Whorfian hypothesis (whether speakers of different languages think differently). Students will read and discuss empirical and theoretical articles, and complete a set of writing assignments and problem sets. Prerequisite: CLPS 0610 or equivalent, or permission of the instructor. For appropriate students interested in developmental/cognitive psychology, linguistics, and applied fields such as speech-language pathology. Fall CLPS1385 S01 16170 TTh 2:30-3:50(03) (J. Morgan)

CLPS 1400. The Neural Bases of Cognition.
Research using animal models has informed and guided many of the recent advances in our understanding of the brain mechanisms underlying cognition. This seminar course will addresses related to animal models of human cognition. Students learn how different aspects of the neural bases of cognition are modeled in animals by reviewing the primary research literature. The course is divided into three sections, each addressing a different topic. Topics vary each year, but may include, for example, learning, memory, attention, decision-making, or cognitive impairment associated with neuropathology or aging. Enrollment limited to 20. Not open to first year students. Spr CLPS1400 S01 24948 M 3:00-5:30(13) (R. Burwell)

CLPS 1420. Cognitive Neuropsychology.
The goal of cognitive neuropsychology is to understand the effects of brain pathology within the context of modern theories of cognition, and to draw inferences about normal or intact cognitive function from patterns of dysfunction observed with brain pathology. Selected papers will focus on research investigations of brain damaged populations within one or more areas of cognition (e.g., perception, memory, or attention) that address topics of current relevance. Pr Requisites:CLPS0040 or CLPS0200 or CLPS0400. CLPS0900 is strongly recommended. WRIT Spr CLPS1420 S01 24949 MWF 10:00-10:50(03) (E. Fest)

CLPS 1480C. Cognitive Control Functions of the Prefrontal Cortex.
The prefrontal cortex has long been known to support higher cognitive functions, including working memory, planning, reasoning, and decision making. This seminar offers an in-depth review of recent empirical and theoretical approaches to understanding prefrontal cortex function. This year the course will focus on prefrontal contributions to the cognitive control of declarative memory. Enrollment limited to 20.

CLPS 1492. Computational Cognitive Neuroscience.
We explore neural network models that bridge the gap between biology and cognition. Begins with basic biological and computational properties of individual neurons and networks of neurons. Examines specialized functions of various brain systems (e.g., parietal cortex, frontal cortex, hippocampus, ganglia) and their involvement in various phenomena, including perception, attention, memory, language and higher-level cognition. Includes a lab component in which students get hands on experience with graphical neural network software, allowing deeper appreciation for how these systems work. Prerequisites: CLPS 0040 or CLPS 0200 or NEUR 0010.

CLPS 1495. Affective Neuroscience.
This course will survey key topics and methods in research on the neuroscience of affect and emotion. It is ideally suited for advanced undergraduates or graduate students who have taken an introductory cognitive neuroscience and/or psychology course. This course will use a variety of behavioral and neuroscientific data to examine the structure of affect/emotion; how affective processes shape cognition and action; how cognition in turn shapes affect; and the nature of variable affects within/across individuals. The course will include in-class presentations, discussions, short lectures, short and long forms of reading responses, and a final research proposal. Fall CLPS1495 S01 16701 Th 4:20-6:30(04) (A. Shenhav)
CLPS 1500. Perception and Action.
The ecological approach treats perceiving and acting as activities of agent-environment system rather than an isolated "mind," and offers an alternative to the prevailing computational/representational view. Topics include inferential and direct perception, perception of the 3D environment, visual control of action, dynamics of motor coordination, and self-organization of behavior. Lecture and discussion. Prerequisite (any one of the following): CLPS 0010 (PSYC 0010), CLPS 0020 (COGS 0010), CLPS 0050 (COGS/PSYC 0440), or CLPS 0010 (COGS 0110). Spr CLPS1500 S01 24950 TTh 10:30-11:50(09) (W. Warren)

CLPS 1510. Auditory Perception Laboratory.
This course considers how we sense and comprehend the world through sound. Laboratory sessions will focus on recording and analyzing sounds, creating sound effects, and completing experiments on the psychology of loudness, pitch, and musical timbre. Class discussions will explore topics in music perception, instrumental design, room acoustics, the emotional impact of sounds, and development of hearing sensitivity and hearing loss. The final project for this course is recording and analyzing the soundscape of Brown, with the overall goal of developing an acoustic map of campus. Fall CLPS1510 S01 16172 M 3:00-5:30(15) (A. Simmons)

One of the main purposes of encoding visual information is to perform visually-guided actions to directly interact with the external world. This seminar will shed light on the behavioral and underlying neural mechanisms involved in integrating perception and cognitive processes, and converting them into action. We will also explore how visuo-motor behavior can provide a useful tool to study a wide range of conscious and unconscious cognitive processes including the current locus of attention, the nature of language representation, spatial representation of number, and high-level decision-making. Prerequisite: CLPS 0010, CLPS 0020, or NEUR 0010. Enrollment limited to 40. Fall CLPS1560 S01 16496 M 3:00-5:30(15) (J. Song)

CLPS 1570. Perceptual Learning.
This course will focus on perceptual learning and visual plasticity. The goal of this course is to understand the mechanisms of visual perceptual learning and visual and brain plasticity. Perceptual learning is defined as long-term performance improvement as a result of visual experiences. Enrollment limited to 20. Recommended prerequisites: CLPS 1291, 1500, and 1520. Spr CLPS1570 S01 24974 F 3:00-5:30(15) (T. Watanabe)

CLPS 1580C. Visualizing Information.
There has been an explosion of interest in how to present information in a visual way rather than as a bunch of boring numbers. Visualizations can be alluring at conveying information, but there have also been colossal failures. We will explore the good, the bad, and the ugly and harness knowledge of visual perception to understand why some are more successful than others. Someone interested in how to create effective visual displays (posters, infographics) would benefit from this course. Some background in visual perception is recommended such as a CLPS or NEUR course about vision or familiarity with graphic design. Fall CLPS1580C S01 16174 TTh 2:30-3:50(03) (L. Welch)

CLPS 1580E. Perception, Attention, and Consciousness.
This seminar will examine how recent neuroscientific research on perception, attention, and consciousness relates to fundamental questions of mental causation, the mind-body problem, and free will. We will address these important questions at the level of NMDA receptors, synapses, dendrites, neurons, and neuronal circuits. We will also consider the psychological and philosophical implications of having such an architecture realized in our brains. Spr CLPS1580E S01 25091 TTh 2:30-3:50(11) (T. Watanabe)

CLPS 1590. Visualizing Vision.
This course provides hands-on experience in studying vision using computer graphics combined with visual psychophysics. Students will gain a better understanding of how images are formed, how one employs properties of image formation in the experimental study of vision, and how the perception of complex images function in biological systems. Labs will rely on matlab and several computer graphics packages (e.g. Lightwave). Enrollment limited to 20. Spr CLPS1590 S01 24954 TTh 10:30-11:50(09) (F. Dominii)

CLPS 1680C. Topics in Development: Theory of Mind.
How do we understand others' mental states? How do we acquire our knowledge of mental states at all? This course will focus on how human beings acquire knowledge of our own and others' mental states. Emphasis will be placed on integrating empirical data with particular theories of cognitive development. Spr CLPS1680C S01 25338 TTh 1:00-2:20(10) (D. Sobel)

CLPS 1700. Abnormal Psychology.
The study of anxiety, stress, and neurotic disorders, psychosomatic disorders, deviant social behavior, affective disorders, and schizophrenia. Considers theories of etiology (causes) and methods of therapeutic treatment, case studies, experimental research, and clinical research. Spr CLPS1700 S01 24955 TTh 9:00-10:20(01) (B. Hayden)

This course explores answers to the question of what enables some individuals to escape the worst psychological consequences of extreme personal disruption caused by a range of human-made and natural disasters. It examines personal accounts, pertinent psychological research, theoretical discussions, and the creative works of catastrophe survivors. Enrollment limited to 20. Spr CLPS1720 S01 24956 TTh 1:00-2:20(10) (J. Wright)

CLPS 1730. Psychology in Business and Economics.
The goal of this course is to explore emerging themes at the intersection of psychological science, business, and behavioral economics. Psychologists are primarily interested in detecting limits to human rationality, whereas economics tends to proceed within the rational-actor model. In business, questions arise of how theoretical models and empirical findings related to the practice of managerial decision-making. Investigations of power and the psychological impact of money are relatively recent additions to the suite of research topics. New methodologies, such as neuro-imaging have led to advances not represented in the traditional framework of organizational psychology. Enrollment limited to 20 junior and senior Psychology concentrators. Fall CLPS1730 S01 16153 TTh 10:30-11:50(13) (J. Krueger)

CLPS 1760. The Moral Brain.
How do we learn to cooperate, help others in need, and appropriately respond after being treated unfairly? The human mind strives to resolve the compelling pressures of self-interest against the greater good. By drawing upon many disciplines including philosophy, social and affective neuroscience, abnormal psychology, law, and experimental economics, this course covers topics from 18th-century philosophy to modern-day neuroscience. We will examine 1) the philosophical and epistemological foundations of moral thought, 2) the influence of emotion and contextual framing on moral action, 3) the psychopathology of immoral choice, and 4) the underlying cognitive and neurobiological processes that guide moral decision-making. Spr CLPS1760 S01 25448 Th 4:00-6:30(17) (O. FeldmanHall)

CLPS 1781. Thinking about the Social World.
Understanding and acting in the social world require, among other things, the process of thinking in abstractions. Abstraction broadens mental horizons, integrates new experiences, and allows communication with other people. In this course we will discuss the different ways in which abstraction has been defined in the literature and look into some surprising implications of abstraction for people's understanding of, and actions in, the social world. Fall CLPS1781 S01 16390 W 3:00-5:30(17) (E. Amit)
How can we make people eat healthier food, protect the environment, save money for retirement, or behave ethically? How can we reduce negative behaviors such as police violence and discrimination of underrepresented groups? Using an interdisciplinary approach, this course will introduce how to “nudge”—how to change people’s behavior through psychological insights, without forbidding options or changing economic incentives. In particular, we will learn about cognitive and emotional biases in decision-making; then we will focus on “nudging remedies” for these systematic biases in various domains, such as health and wealth; finally, we will actively tackle some problems in an in-class nudging workshop.
Spr CLPS1783 S01 25087 W 3:00-5:30(14) (E. Amit)

CLPS 1790. Personality and Clinical Assessment.
Examines methods used in the study of child and adult personality, including microanalysis of social interactions, observer report, self report, test data, and life outcome data. Specialized personality assessment instruments will be examined in the context of their reliability, predictive and construct validity. Students will design research projects using these methods, collect and analyze data, give oral presentations, and prepare a written report of their research. Prerequisites: CLPS 0701 (PSYC 0300), and CLPS 0900 (PSYC/COGS 0090) or equivalent. Enrollment limited to 27.
Fall CLPS1790 S01 16176 WF 2:00-3:20 (J. Wright)

CLPS 1890. Laboratory in Psycholinguistics.
An advanced course in methodological approaches to the study of psycholinguistics. Processes (e.g. with adult lexical access, sentence processing, corpus linguistics, etc.) Recommended prerequisites: CLPS 0800 (COGS 0450) and CLPS 0900 (COGS/PSYC 0090), or equivalent.
Spr CLPS1890 S01 24977 TTh 2:30-3:50(11) (J. Morgan)

CLPS 1900. Research Methods And Design.
This course is designed to provide CLPS concentrators (psychology/cognitive science/cognitive neuroscience) with a variety of tools needed to conduct research: sources of data, standard designs (e.g., factorial experimental, correlational, longitudinal), research ethics, and best practices of literature review (e.g., meta-analysis). The course will include lectures, laboratory exercises, data collection, statistical analysis, and presentation of findings in written and oral reports. (Previously CLPS 1091)
Fall CLPS1900 S01 16702 TTh 6:40-8:00PM(05) (L. Welch)
Spr CLPS1900 S01 25377 TTh 2:30-3:50(11) (A. Shenhav)

Independent study or directed research in cognitive science. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor permission required.
Fall CLPS1970 S01 16577 TTh 2:00-3:20 (A. Shenhav)

Required of all ScB concentrators and Honors students in psychology. Instructor permission required. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Examines general philosophical and theoretical issues that cut across cognitive science. Each student writes a substantial paper on a topic in cognitive science. Required of cognitive science concentrators. Enrollment limited to concentrators in the 7th semester or beyond, and, by permission, to others who have significant course background in cognitive science. (Previously numbered CLPS 1900.)
Fall CLPS1990 S01 16693 MWF 2:00-2:50(07) (J. Anderson)

This course is the first of a two-course sequence that provides graduate students with background in the core topics and themes in the cognitive and psychological sciences. Topics include sensory systems, perception, action, evolution and development, phonetics and phonology, attention, learning, memory, and executive function. Students are also introduced to a wide range of approaches and levels of analysis that scientists adopt to study these topics. Weekly topics are addressed in lectures and assigned readings. A separate seminar session involves presentation of current papers by students and discussion with faculty. Open to graduate students only.
Fall CLPS2001 S01 16179 TTh 2:30-3:50(03) (W. Warren)

CLPS 2091. Graduate First Year Project Research.
Please check Banner for the correct section number and CRN to use when registering for this course.

CLPS 2092. Graduate First Year Project Research.
Please check Banner for the correct section number and CRN to use when registering for this course. Instructor permission required.

CLPS 2095. Practicum in Teaching.
Each student will assist a designated faculty member in teaching a course in cognitive science or related discipline. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor permission required.

CLPS 2096. Directed Graduate Research.
No description available. Instructor permission required.

CLPS 2450. Exchange Scholar Program.
Fall CLPS2450 S01 14958 Arranged "To Be Arranged"

CLPS 2906. Experimental Design.
The course designed for students at the intermediate level or above and will cover t-tests, power analysis, correlation, simple and multiple linear regression, logistic regression, analysis or variance, non-parametric tests, randomization and bootstrapping, among others. Instructor permission required. Open to graduate students only.
Fall CLPS2906 S01 16180 TTh 9:00-10:20(08) (W. Heindel)

CLPS 2908. Multivariate Statistical Techniques.
This course covers the basic multivariate techniques currently used in psychology and related sciences: multiple regression, logistic regression, principal components and factor analysis, multivariate analysis of variance, discriminant function analysis, and log-linear analysis. Students will learn these techniques’ conceptual foundations, their proper selection for a given data set, and the interpretation of computer output from statistical analysis packages (primarily SPSS). Enrollment limited to 20 graduate students.
Spr CLPS2908 S01 24959 TTh 10:30-11:50(09) (B. Malle)

CLPS 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall CLPS2970 S01 14959 Arranged "To Be Arranged"
Spr CLPS2970 S01 23988 Arranged "To Be Arranged"

CLPS 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall CLPS2990 S01 14960 Arranged "To Be Arranged"
Spr CLPS2990 S01 23989 Arranged "To Be Arranged"

Humanities
**HMAN 2400B. Trans/Passing, In Theory**
This course examines the social, political, and cultural deployments of what we call “trans/passing” in a variety of literary and visual texts, mostly drawn from the national popular imaginary. While passing has been considered an extension and disruption of “settled” racial identities, and trans has generally been invoked as an intersectional or genderqueer subject position, our neologism points to the confluence of these terms in contemporary popular culture, a confluence that braids and scrambles the multiple registers of gender, race, sexuality, and class.

Fall HMAN2400S S01 15862 Arranged
(J. Khalip)

**HMAN 2400D. Potential History of Photography: Collaboration (MCM 2100R).**
Interested students must register for MCM 2100R.
Fall HMAN2400S S01 16873 Arranged “To Be Arranged”

**Comparative Literature**

**COLT 0510F. Fidel Castro and Che Guevara, The Men and the Myths.**
Che Guevara and Fidel Castro are among the twentieth century’s most iconic figures, thanks to their roles in the Cuban Revolution and in anti-imperialist struggles across the globe. They are also among the most divisive, eliciting passionate disapproval among some and strong admiration among others. In this seminar, we will read Guevara and Castro’s speeches and writings alongside literary, visual and cinematic representations of them, paying particular attention to the ways in which their lives and deaths have generated distinct interpretations, in Cuba and beyond. Open only to first-year students. FYS

Fall COLT0510FS S01 15722 TTh 1:00-2:20(10) (E. Whitfield)

**COLT 0510K. The 1001 Nights.**
Explores the origins, performance, reception, adaptation, and translation of the *1001 Nights*, one of the most beloved and influential story collections in world literature. We will spend the semester in the company of genies, princes, liars, slaves, mass murderers, orientalists, and Walt Disney, and will consider the *Nights* in the context of its various literary, artistic, and cinematic afterlives.

Spr COLT0510KS S01 24677 MWF 11:00-11:50(04) (E. Muhanna)

**COLT 0510P. Reading the Renaissance.**
How do these works figure the renaissance as a cultural formation? Petrarch, Rime Sparse; Boccaccio, Decameron; Castiglione, Book of the Courtier; Erasmus, Praise of Folly; Thomas More, Utopia; Machiavelli, Prince, Mandragola; Wyatt and Ronsard (poems), Spenser, Faerie Queen and Shepheards Calender, Cervantes, Don Quixote. Spr COLT0510PS S01 24693 MWF 12:00-12:50(05) (S. Foley)

**COLT 0610D. Rites of Passage.**
Examines a seemingly universal theme-concerning of age-by focusing on texts from disparate periods and cultures. Proposes that notions of “growing up” are profoundly inflected by issues of class, gender and race, and that the literary representation of these matters changes drastically over time. Texts from the Middle Ages to the present; authors drawn from Chrétien de Troyes, Quevedo, Prévost, Balzac, Brontë, Twain, Faulkner, Vesaas, Ruyi, Satrapi and Foer. Enrollment limited to 20 first year students. FYS

Fall COLT0610DS S01 15639 TTh 1:00-2:20(10) (A. Weinstein)

**COLT 0610E. Crisis and identity in Mexico, 1519-1968.**
Examines four moments of crisis/critical moments for the forging of Mexican identity: the “Conquest” as viewed from both sides; the hegemonic 17th century; the Mexican Revolution as represented by diverse stakeholders; the “Mex-hippies” of the 1960s. We especially explore how key literary, historical, and essayistic writings have dealt with Mexico’s past and present, with trauma and transformation. Readings include works by Carlos Fuentes, Sor Juana Inés de la Cruz, Octavio Paz, Juan Rulfo, and the indigenous Nican Mopohua on the Virgin of Guadalupe. All in English. No prerequisites. WRIT.

Fall COLT0610ES S01 15913 TTh 2:30-3:50(03) (S. Merim)

**COLT 0610T. Chinese Empire and Literature.**
This course explores ancient and modern approaches to empire and imperialism, focusing on China from the Qin (221-206 BCE) establishment of unified empire through the Qing (1644-1911 CE) confrontation with the British and other European empires. Emphasis will be placed on the relation between imperial expansion and literary production, and the role of Chinese and non-Chinese literature in representing China’s multilingual and multiethnic past. Texts include China’s most famous work of historical literature, Sima Qian’s *Shiji*; poems, short stories, tomb sculptures, contemporary films; as well as critical essays on empire, colonization, and cross-cultural heritage.

Fall COLT0610TS S01 15841 MWF 12:00-12:50(12) (T. Chin)

**COLT 0610Y. Women’s Writing in the Arab World.**
This course examines Arab women’s writing through the lenses of both Arabic and Western feminist theory and criticism. Beginning with a survey of pre-modern female literary personae in Arabic (the e juliet, the mystic, the singing slave), we will then examine major figures in the early modern feminist movement, modernist poetry, autobiography, film, and the novel. No Arabic required; supplemental Arabic section may be offered at the discretion of the professor. Texts by Etel Adnan, Salwa Bakr, Hoda Barakat, Assia Djebar, Nazik al-Mala’ika, Alifa Rifaat, Hanan al-Shaykh, Miral al-Tahawy, Fadwa Tuqan, Adanma Shibli. Films by Moufida Tlatli, Annemarie Jacir. DPLL

Fall COLT0610YS S01 16691 MWF 2:00-2:50(07) (E. Drumsta)

**COLT 0610Z. Intersections of Race and Culture in the West.**
This course will introduce students to ways in which knowledge, power and race have been interrelated in understandings of culture and in the writing and reception of literature. Beginning in antiquity, we will trace a history of political, ethnic, and social groups’ perceptions and categorizations of each other and of shifts in the definitions of “race” and “culture” as concepts. We will then consider changing ideas of alliance, belonging and power, in the context of contemporary American and global politics. The course will draw from readings across various languages, and from the work and lectures of several guest speakers. DPLL SOPH

Fall COLT0610ZS S01 16082 F 3:00-5:30(11) (E. Whitfield)

**COLT 0711H. The Arabic Novel, from Realism to Fantasy.**
This course offers students both a foundation in the “classics” of Arabic fiction and a foray into recent experimentalizations with form and language. We’ll spend the first half of the semester with Egyptian Nobel laureate Naguib Mahfouz, tracing his evolution from Victor Hugo-esque chronicler of life in Cairo to Faulknerian experimentalist. We’ll then examine the works of authors who deem themselves “post-Mahfouzian,” including Gamal al-Ghitani, Sonallah Ibrahim, Elias Khoury, and Hanan al-Shaykh. Students will emerge with a transnational, inclusive understanding of the Middle East glimpsed through the region’s literature. No Arabic necessary; students with Arabic may read in the original.

Spr COLT0711HS S01 24819 TTh 9:00-10:20(01) (E. Drumsta)

**COLT 0810H. How Not to Be a Hero.**
One of Shakespeare’s greatest plays is about a character who was an irredeemable failure: Coriolanus. What can failure teach us? What kind of strength does a language of failure possess? We will read the ancient sources themselves (Livy, Lucian, Plutarch), and modern adaptations of these (Bertolt Brecht, T. S. Eliot, Günter Grass). We will also look at other “exemplary” failures who inspired Shakespeare and later literature, including Lucullus and Timon.

Fall COLT0810HS S01 15721 TTh 9:00-10:20(08) (K. Haynes)

**COLT 0810I. Tales and Talemakers of the Non-Western World.**
Examines many forms of storytelling in Asia, from the *Epic of Gilgamesh* and the *Arabian Nights* to works of history and fiction in China and Japan. The material is intended to follow the evolution of non-western narratives from mythological, historical and fictional sources in a variety of cultural contexts. Topics will include myth and ritual, the problem of epic, tales of love and the fantastic, etc. DPLL

Spr COLT0810IS S01 24740 MWF 1:00-1:50(06) (D. Levy)
COLT 0810O. Civilization and Its Discontents
Investigates the age-old tension between order and chaos as a central dynamic in the making and interpretation of literature. Texts will be drawn from drama, fiction and poetry from Antiquity to the present. Authors include Sophocles, Shakespeare, Racine, Beckett, Prevost, Bronte, Faulkner, Morrison, Blake, Whitman, Dickinson, and Rich.
Spr COLT0810OS01 24679 TTh 10:30-11:50(09) (A. Weinstein)

COLT 0812B. What is Colonialism? - Archives, Texts and Images.
Through a close reading of a variety of texts and images from 16th-19th century we will study the transformation of lands and people into appropriable objects and the formation of political regimes in and through different colonial projects. We will follow the encoding of slavery in literary works, in the corpus of laws, in travelers' visual renderings and in the bodies of people. We will use the archive as a source and a site for the production of knowledge. Students will create small textual and visual archives around different topics, and will use them in their final work.
DPLL
Spr COLT0812BS01 25385 MWF 10:00-10:50(03) (A. Azoulay)

COLT 1210. Introduction to the Theory of Literature.
An historical introduction to problems of literary theory from the classical to the postmodern. Issues to be examined include mimesis, rhetoric, hermeneutics, history, psychoanalysis, formalisms and ideological criticism (questions of race, gender, sexuality, postcolonialism). Primarily for advanced undergraduates. Lectures, discussions; several short papers.
Fall COLT1210 S01 15638 MWF 1:00-1:50(06) (S. Bernstein)

COLT 1310E. A Classical Islamic Education: Readings in Arabic Literature.
This seminar introduces students to the essential texts of a classical education in the Arabic-Islamic world. What works of poetry, literary criticism, bellettristic prose, biography, geography, history, and other disciplines were considered staples of a well-rounded education in medieval Baghdad, Cairo, Damascus, or Fez? Emphasis will be placed on close and patient readings of primary sources. At least three years of Arabic required.
Fall COLT1310ES01 16692 W 3:00-5:30(17) (E. Muhanna)

COLT 1411C. Shakespearean Comedy (ENGL 1361H).
Interested students must register for ENGL 1361H.
Fall COLT1411CS01 16869 Arranged 'To Be Arranged'

COLT 1420F. Fantastic and Existentialist Literatures of Argentina, Uruguay and Brazil.
Jorge Luis Borges proclaimed that South American writers can "wield all themes" without superstition, with reverence. This course examines the ways in which 20th century writers from Argentina, Uruguay and Brazil appropriated European fantastic and existentialist fictions, taking them in new directions. Readings, in English or original languages, include Borges, Cortázar, Onetti, Lispector. Prerequisite: previous college literature course(s).
Spr COLT1420FS01 24775 TTh 2:30-3:50(11) (S. Merrim)

COLT 1420T. The Fiction of Relationship.
Explores the manifold ways in which narrative literature sheds light on the relationships that we have in life, both knowingly and unknowingly. The novel form, with its possibilities of multiple voices and perspectives, captures the interplay between self and other that marks all lives.
Authors include Lacos, Melville, Bronté, Kafka, Woolf, Faulkner, Borges, Burroughs, Vesaas, Morrison, and Coetzee.
Fall COLT1420TS01 15645 TTh 10:30-11:50(13) (A. Weinstein)

COLT 1420X. The European Novel From Goethe to Proust.
Readings of major European novels of the 19th century as literary reflections on philosophical questions such as aesthetic and ethical judgment, subjectivity, mimesis, memory and the novel itself as a genre. Authors include Goethe, Stendhal, Balzac, Dickens, Flaubert and Proust. Selections from Kant, Hegel, Marx, Lukács and Benjamin.
Spr COLT1420XS01 24777 F 3:00-5:30(15) (M. Redfield)

COLT 1421V. Modernisms North and South: James Joyce and Roberto Bolaño.
James Joyce's Ulysses (1922) and Roberto Bolaño's The Savage Detectives (1998) are weighty, influential, often intimidating works that bookend literary production in the twentieth century. Both are also moving narratives about humans with different sorts of artistic, emotional, and bodily ambitions, grappling with new forms of subjective and collective life in modernity, trying to work out their own place within social, political and artistic systems. Join Stephen Dedalus, Leopold and Molly Bloom, Ulises Lima and a cast of minor characters as they make their way through the hearts, minds, memories, and nervous systems of a range of modern metropoles.
Fall COLT1421VS01 15654 MWF 12:00-12:50(12) (M. Clayton)

COLT 1422B. Family Fictions in the Enlightenment.
This course will study the changing representation of the family in the literature, art and culture of Enlightenment Europe. We will analyze the critique of traditional models of the family and the construction of an ideal of domesticity based on new concepts of cultural heritage (turath) and marriage. We will read stories of "domestic misfortunes" as well as proposals for alternative solutions to "ill husbandry." Readings will include novels, plays, theoretical texts and visual documents (paintings and caricatures).
Spr COLT1422BS01 24780 TTh 2:30-3:50(11) (O. Mostefai)

COLT 1422F. Short Forms: Major Works in a Minor Key (HISP 1330Q).
Interested students must register for HISP 1330Q.
Spr COLT1422FS01 25574 Arranged 'To Be Arranged'

COLT 1430D. Critical Approaches to Chinese Poetry.
Examination of works of Chinese poetry of several forms and periods in the context of Chinese poetic criticism. Knowledge of Chinese not required, but provisions for working with original texts will be made for students of Chinese language.
Fall COLT1430DS01 15647 TTh 9:00-10:20(08) (D. Levy)

COLT 1431B. Modern Arabic Poetry, Between Tradition and Innovation.
An advanced course with readings in modernist Arabic poetry, beginning with the so-called neo-classical poets and proceeding through the formal and thematic innovations of Romanticism and Modernism, from Egypt to Iraq and beyond. We will examine such recurring themes as love, loss, and longing; war, exile, and homeland; cultural heritage (turath) and creative innovation (iḥda'); gender and genre. All readings in Arabic; at least four years of Arabic language study (or equivalent) required for enrollment. Poems by Shawqi, Mutran, Abu Shadi, Jibran, Abu Madi, al-Sayyab, al-Maʿlāʾikāh, al-Bayāṭī, ‘Abd al-Sabur, Sayigh, Ziyad, Tuqan, Darwish, Hawī, al-Khalid, Ansūb, Qababnī, al-Maghfūl, Mersal, and others.
Pre Requisites: At least three years of Arabic language study.
Spr COLT1431BS01 24818 TTh 6:40-8:00PM (18) (E. Drumsta)

COLT 1431C. Poets, Poetry, and Politics.
The award of the 2016 Nobel Prize for Literature to Bob Dylan ignited a lively debate about who is, and who is not, a poet. Historically, who were deemed poets, what was their function? What do their poems do and how do they work? Do they foment revolution or “make nothing happen,” as Auden once wrote? How does the poet aspire to a unique, individual voice even as he or she may (be seen to) best represent a constituency? This course relates the poetic act to political action and interrogates the commonly aired contention that politics makes for bad poetry.
Fall COLT1431CS01 16706 MWF 10:00-10:50(14) (V. Caloychous)

COLT 1440P. Nationalism and Transnationalism in Film and Fiction.
Reports of the demise of nationalism always seem greatly exaggerated. How are notions of transnationalism dependent on rewriting the nation? This course revisits films of world cinema acclaimed for their national cachet from a transnational perspective and in dialogue with their literary intertexts. We will study these films’ fictional narration, cinematic articulation, and critical reception and consider how they signify in multinational networks of funding, distribution, production, conception, and critical reception. Students will analyze the political, ethical, and artistic stakes of confronting difference as both a located and universal stance or commodity. Films and texts chosen from across the globe.
Fall COLT1440PS01 16813 T 4:00-6:30(09) (V. Caloychous)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
COLT 1710A. Introduction to Literary Translation.
This is a workshop course introducing the history and theory of literary translation, with demonstrations and exercises translating poetry and prose. All languages welcome, but students must be proficient to the level of reading literature in the original language. Foreign language through 0600 or permission of the instructor.
Fall COLT1710A S01 15646 TTh 2:30-3:50(03) (D. Levy)

COLT 1710C. Literary Translation.
Exercises and investigations in the history, theory, and practice of literary translation. Prerequisite: at least one foreign-language course in literature at 1000-level (or equivalent).
Spr COLT1710C S01 24811 W 3:00-5:30(14) (F. Gander)

COLT 1810G. Fiction and History.
How the historical fiction that has flourished over the past four decades challenges the notions of objectivity and totalization, while providing alternative viewpoints for the reconstruction and reinterpretation of the past. Authors considered include Grass, Doctorow, Delloio, Garcia-Marquez, Allende, Danticat and Gordimer. Theoretical texts by White, LaCapra, Benjamin, Ricoeur, and Chater. Films such as The Official Story and Europa, Europa will be viewed and incorporated into the discussions. Prerequisite: two previous courses in literature. Enrollment limited to 25. Instructor permission required.
Spr COLT1810G S01 24744 W 3:00-5:30(14) (L. Valente)

COLT 1813K. The Problem of the Vernacular.
It has been said that a language is a dialect with an army and a navy. Under what conditions do dialects, vernaculars, creoles, and slangs become mediums for literary and artistic expression? How have writers in different cultures managed the relationship between their "official" national languages and their more intimate mother tongues? This course explores this problem in a variety of literary traditions, including Chinese, Arabic, Greek, Hebrew, Scots, Latin, and the Romance vernaculars, and a variety of other languages.
WRIT Fall COLT1813K S01 16698 TTh 10:30-11:50(13) (E. Muhanna)

COLT 1813N. Early Modern Women's Writing.
Interested in women writers, feminism? If so, it's vital to understand their early modern origins. This course explores the rich feminist tradition enacted in the often edgy texts of women writing on the cusp of modernity. We study writers from England, France, Latin America, North America, and Spain, focusing on self-fashioning, gender and sexuality, love and marriage, imagined worlds, religion, eccentricity, and writing and fame. Authors include Anne Bradstreet, Margaret Lucas Cavendish, Sor Juana Inés de la Cruz, Mme de Lafayette, María de Zayas. Enrollment limited to 20. Texts and class in English.
Spr COLT1813N S01 25386 F 3:00-5:30(15) (S. Merinn)

COLT 1813Z. Soil: The Earth and Environmental Writing.
Why do people fight over soil? In an increasingly urbanized world, how have the ways we talk about soil, earth, and land shifted? In this class, we will explore the politics and aesthetics of writing about soil in its particular relations to ecology, homeland, geography, and race. Readings include Homer’s Odyssey, Derek Walcott’s Omeros, and ecological criticism from ancient China to Rachel Carson and Ramachandra Guha and beyond. Limited to 20.
Fall COLT1813Z S01 16699 MWF 9:00-9:50(01) (T. Chin)

We will explore the myth of the East that develops in Europe during the Enlightenment in the wake of the extremely popular and influential translations of The Thousand and One Nights (Alf Layla wa Layla) in the early eighteenth century. We will focus on narratives of the encounter between East and West, on the discovery and construction of the Oriental “Other,” and on its representation in the literary and visual culture of the Enlightenment. Particular attention will be paid to the figure of Shahrazad and the theme of the harem. We will study some modern versions of the Arabian Nights.
Fall COLT1814D S01 16705 M 3:00-5:30(15) (O. Mostefai)

COLT 1814T. Maghrebi Fiction and Psychoanalysis.
Recent fiction from the Maghreb (Morocco, Algeria, Tunisia, Libya) in both French and Arabic has been preoccupied with mothers and fathers, gestation and regeneration, inheritance and transmission, filled with figures for desires and origins blocked or diverted. In this course, we will read Maghrebi literature together with works of psychoanalytic theory, focusing in particular on uncertain origins and aborted futures, geographies of the North African landscape and of the soul. Texts by Achari, Berrada, Chrabbi, Djebar, Kateb, al-Koni, Mustaghanimi, Wattar, Deleuze & Guattari, Fanon, Freud, Jameson, Jung, Lacan. Students of French or Arabic invited to read in the original.
Fall COLT1814T S01 15775 Th 4:00-5:30(04) (E. Drumsta)

COLT 1814U. Politics of Reading.
What do we do when we read? And do we even do something, or, as Blanchot suggests, do we rather let be? While being true to Michel de Certeau’s plea for a “politics of reading” and an “autonomy of the reader”, we will question its binary logic (active vs. passive): 1. by looking closely at the (de)construction of a “sovereign reader” in Hobbes’ Leviathan; 2. by analyzing the reading imperative—“Read!”—as it is staged in Plato’s and, above all, in Sade’s erotic; 3. by taking seriously Walter Benjamin’s paradoxical intuition that one should “read what was never written”.
Fall COLT1814U S01 15812 Th 6:40-8:00PM(05) "To Be Arranged"

COLT 1814V. The Silk Roads, Past and Present.
The Silk Road has historically been the crossroad of Eurasia; since the third-century BCE it has linked the societies of Asia—East, Central, and South—and Europe and the Middle East. The exchange of goods, ideas, and peoples that the Silk Road facilitated has significantly shaped the politics, economies, belief systems, and cultures of many modern nations: China, Russia, Afghanistan, Uzbekistan, and India. This course explores the long history and the mythologies or imaginations of the Silk Road in order to understand how the long and complex pasts of the regions it touches are important in the age of globalization.
Spr COLT1814V S01 24695 W 3:00-5:30(14) (T. Chin)

COLT 1814W. Repetition: Kierkegaard, Nietzsche and Freud.
A study of the concept and the textual practices of repetition. We will consider the relation between repetition and transcendence, history, memory and art. The course will focus on how the category and the event of repetition problematize identity, interpretation and expression. Issues include religion and aesthetics of repetition (Kierkegaard); history and the eternal return (Nietzsche); repetition compulsion and the death drive (Freud). We will especially be interested in how the theme of repetition informs the way these thinkers write and what problems this poses to interpretation and understanding.
Spr COLT1814W S01 24830 TTh 10:30-11:50(09) (S. Bernstein)

COLT 1814X. Faulkner.
In examining Faulkner's major works from the early stream-of-consciousness novels through the history-driven and race-inflected texts of the 30s and 40s, this course will evaluate Faulkner's practice as a writer working both in and against Southern culture, and as Modernist writing within an international context. Issues include narrative experimentation, race, class, gender, and the evolution of Faulkner's work.
Spr COLT1814X S01 24826 TTh 1:00-2:20(10) "To Be Arranged" (A. Weinstein)

COLT 1814Z. Alexander to Cleopatra: Greek Literature and Culture (CLAS 1120Y).
Interested students must register for CLAS 1120Y.
Fall COLT1814Z S01 16870 Arranged "To Be Arranged"

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Section numbers vary by instructor. Please see the registration staff for the correct section number to use when registering for this course.

Special work or preparation of honors theses under the supervision of a member of the staff. Open to honors students and to others. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.
### COLT 2450. Exchanges Scholar Program.

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<td>COLT2450 S01 14961</td>
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<td>COLT2450 S01 23990</td>
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### COLT 2520F. Theories of the Lyric

Through readings of recent critical discussions of the lyric genre, we will explore more general methodological problems of literary theory. Questions to be raised include: the role of form, structure and tropes in analyzing poetry; problems of subjectivity and voice; the relation between poetry, history and politics; the function of reading; and the problematic "objectivity" of criticism. Readings from Jakobson, Benveniste, Jauss, Benjamin, Johnson, De Man, Lacoue-Labarte, Agamben, Badiou and Derrida. Focus on poets Hölderlin, Baudelaire and Celan.

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<tr>
<td>Spr</td>
<td>COLT2520F S01 24680</td>
<td>Th 4:00-6:30(17)</td>
<td>(S. Bernstein)</td>
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### COLT 2650R. The New Foucault: Between Antiquity and Neoliberalism

Since the publication and translation of his final lectures, a "new" Foucault has emerged, requiring a radical revision in our understanding of his work. Moving beyond his study of sexuality and biopolitics, Foucault turned to antiquity in order to investigate the diverse practices by which the self has been constituted and obliged to bear truth burdens. The exercise of political power is intimately connected with these exercises. In the seminar, we will read Foucault’s last works on truth-telling and the hermeneutics of the subject, in the dual context of emergent neo-liberalism and a new understanding of antiquity.

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<tr>
<td>Spr</td>
<td>COLT2650R S01 24697</td>
<td>M 3:00-5:30(13)</td>
<td>(K. Haynes)</td>
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### COLT 2821Q. Not With The Master’s Tools: Freedom, Enslavement, Emancipation, and Reparations.

Focusing on the era of reconstruction - and reading texts of various genres and orientations including dairies, novels, Freedmen’s bureau records, enslaved petitions, newspapers, iconographic plans and photographs) and different theoretical accounts by W.E.B.DuBois, Frantz Fanon, C.L.R.James, Audre Lorde, Hannah Arendt, and Olympe de Gouges we will study slavery as a condition that impacted enslaved people, enslaving agents and other members of the communities and continue to impact their descendants. We will also explore categories such as abolition, ownership, rights, reparations, expertise knowledge, master’s tools and master pieces and use archives as sources and tools.

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<tr>
<td>Fall</td>
<td>COLT2821Q S01 15811</td>
<td>MWF 11:00-11:50(16)</td>
<td>(A. Azoulay)</td>
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### COLT 2830M. Potential History of Photography: Collaboration (MCM 2100R).

Interested students must register for MCM 2100R.

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### COLT 2890. Reading and Research.

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

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<td>Fall</td>
<td>COLT2990 S01 14962</td>
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<td>Spr</td>
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### Computer Science

**CSCI 0020. The Digital World.**

Removes the mystery surrounding computers and the ever-growing digital world. Introduces a range of topics and many aspects of multimedia, along with explanations of the underlying digital technology and its relevance to our society. Other topics include artificial intelligence, IT security, ethics and the economics of computing as well as the effects of its pervasiveness in today's world. Introductory programming and analytic skills are developed through HTML, Photoshop, Excel and Python assignments. CSCI 0020 is a good introduction to a wide range of CS topics that have broad relevance in our society. No prerequisites.

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<tr>
<td>Fall</td>
<td>CSCI0020 S01 16182</td>
<td>TTh 9:00-10:20(08)</td>
<td>(D. Stanford)</td>
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**CSCI 0081. TA Apprenticeship: Full Credit.**

Being an undergraduate TA is a learning experience: one not only gets a deeper understanding of the course material, but gains management and social skills that are invaluable for one's future. Students taking this course must first be selected as an undergraduate TA for a Computer Science course, a course the student has taken and done well in. Students will work with the course's instructor on a variety of course-related topics, including preparation of material and development of assignments. Whether CSCI 0081 or its half-credit version (CSCI 0082) is taken is up to the professor of the course being TA'd. Instructor permission required.

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<td>Fall</td>
<td>CSCI0081 S01 16184</td>
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<td>(T. Doepner)</td>
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**CSCI 0082. TA Apprenticeship: Half Credit.**

Being an undergraduate TA is a learning experience: one not only gets a deeper understanding of the course material, but gains management and social skills that are invaluable for one's future. Students taking this course must first be selected as an undergraduate TA for a Computer Science course, a course the student has taken and done well in. Students will work with the course's instructor on a variety of course-related topics, including preparation of material and development of assignments. Whether CSCI 0082 or its full-credit version (CSCI 0081) is taken is up to the professor of the course being TA'd. Instructor permission required.

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<td>Fall</td>
<td>CSCI0082 S01 16185</td>
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**CSCI 0150. Introduction to Object-Oriented Programming and Computer Science.**

Emphasizes object-oriented design and programming in Java, an effective modern technique for producing modular, reusable, internet-aware programs. Also introduces interactive computer graphics, user interface design and some fundamental data structures and algorithms. A sequence of successively more complex graphics programs, including Tetris, and culminating in a significant final project, helps provide a serious introduction to the field intended for both potential concentrators and those who may take only a single course. No prerequisites, no prior knowledge of programming required.

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<td>Fall</td>
<td>CSCI0150 S01 15899</td>
<td>TTh 2:30-3:50(03)</td>
<td>(A. van Dam)</td>
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**CSCI 0170. Computer Science: An Integrated Introduction.**

CSCI0170/0180 is an introductory sequence that helps students begin to develop the skills, knowledge, and confidence to solve computational problems elegantly, correctly, efficiently, and with ease. The sequence is unique in teaching both the functional and imperative programming paradigms—the first through the languages Scheme and ML in CSCI0170; the second through Java in CSCI0180. The sequence requires no previous programming experience. Indeed, few high school students are exposed to functional programming; hence even students with previous programming experience often find this sequence an invaluable part of their education.

Although students are taught to use programming languages as tools, the goal of CSCI0170/0180 is not merely to teach programming. On the contrary, the goal is to convey to students that computer science is much more than programming! All of the following fundamental computer science techniques are integrated into the course material: algorithms, data structures, analyses, problem solving, abstract reasoning, and collaboration. Concrete examples are drawn from different subareas of computer science: in 0170, from arbitrary-precision arithmetic, natural language processing, databases, and strategic games; in 0180, from discrete-event simulation, data compression, and client/server architectures.

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<td>Fall</td>
<td>CSCI0170 S01 15886</td>
<td>MWF 10:00-10:50(14)</td>
<td>(J. Hughes)</td>
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</table>
CSCI 0190. Accelerated Introduction to Computer Science.
A one-semester introduction to CS covering programming integrated with core data structures, algorithms, and analysis techniques, similar to the two-course introductory sequences (CSCI 0150 - CSCI 0160 and CSCI 0170 - CSCI 0180). Students wishing to take CSCI 0190 must pass an online placement exam. Though the exam is most appropriate for students who have had some prior programming experience, all are welcome to try learning the material and doing the exam. Exam information can be found here: http://cs.brown.edu/courses/cs019/2017/. The exam must be taken before summer ends; students who have not passed the exam won’t be allowed to register.
Fall CSCI0190 S01 15895 MWF 10:00-10:50(14) (S. Krishnamurthi)

CSCI 0330. Introduction to Computer Systems.
High-level computer architecture and systems programming. The course covers the organization of computer systems (in terms of storage units, caches, processors, and I/O controllers) and teaches students assembly-language programming and C-language programming. Extensive programming exercises introduce students to systems-level programming on Unix systems, as well as to multi-threaded programming with POSIX threads. Students will be introduced to the functions of operating systems. Prerequisite: CSCI 0150, 0180, or 0190.
Fall CSCI0330 S01 15883 MWF 2:00-2:50(07) (T. Deopner)

CSCI 0530. Directions: The Matrix in Computer Science.
Introduces vectors, matrices and their role in computer science in three components: (1) concepts, theorems, and proofs, (2) procedures and programs, and (3) applications and working with data. Weekly lab sessions where students apply concepts to a real task with real data. Example labs: transformations in 2-d graphics, error-correcting codes, image compression using wavelets, synthesizing a new perspective in a photo, face recognition, news story categorization, cancer diagnosis using machine learning, matching airplanes to destinations, Google’s PageRank method. Other topics as time allows. Skills in programming and prior exposure to reading and writing mathematical proofs required.
Fall CSCI0530 S01 15898 M 3:00-5:30(15) (P. Klein)

Fundamental concepts in 2D and 3D computer graphics, e.g., 2D raster graphics techniques, simple image processing, and user interface design. Focuses on geometric transformations, and 3D modeling, viewing and rendering. A sequence of assignments in C++ culminates in a simple geometric modeler and ray tracer. Prerequisite: CSCI 0160, CSCI 0180, or CSCI 0190. Some knowledge of basic linear algebra is helpful but not required. Strong object-oriented programming ability (e.g., in C++, Java or Python) is required.
Fall CSCI1230 S01 15900 TTh 10:30-11:50(13) (A. van Dam)

CSCI 1234 is a half-credit course intended to be taken concurrently with CSCI 1230 and provides students with a greater understanding of the material by having them extend each of 1230’s assignments to greater depth.
Fall CSCI1234 S01 16187 Arranged (A. van Dam)

CSCI 1250. Introduction to Computer Animation.
Introduction to 3D computer animation production including story writing, production planning, modeling, shading, animation, lighting, and compositing. The first part of the course leads students through progressive exercises that build on each other to learn basic skills in 2D and 3D animation. At each step, student work is evaluated for expressiveness, technical correctness and aesthetic qualities. Students then work in groups creating a polished short animation. Emphasis on in-class critique of ongoing work which is essential to the cycle of visually evaluating work in progress, determining improvements, and implementing them for further evaluation.
Fall CSCI1250 S01 15894 W 12:00-1:50 (B. Meier)

CSCI 1260. Compilers and Program Analysis.
Lexical analysis, syntactic analysis, semantic analysis, code generation, code optimization, translator writing systems. Prerequisites: CSCI 0220 and 0320; 0510 is recommended.
Fall CSCI1260 S01 15902 MWF 9:00-9:50(01) (S. Reiss)

CSCI 1270. Database Management Systems.
Introduction to database structure, organization, languages, and implementation. Relational model, query languages, query processing, query optimization, normalization, file structures, concurrency control and recovery algorithms, and distributed databases. Coverage of modern applications such as the Web, but with emphasis on Database Management Systems internals. Prerequisites: CSCI 0160, CSCI 0180, or CSCI 0190. One of CSCI 0330 or CSCI 0320 is strongly recommended.
Fall CSCI1270 S01 15901 MW 3:00-4:20(17) (S. Zdonik)

CSCI 1300. User Interfaces and User Experience.
Topics include understanding when to use different interfaces, modeling and representing user interaction, principles of user experience design, eliciting requirements and feedback from users, methods for designing and prototyping interfaces, and user interface evaluation. Students interested in learning the process behind building a user interface and gaining hands-on experience designing a user interface should take this course. Programming experience is unnecessary. There will be weekly assignments, readings, design labs, and UI camp (new!) as a bootcamp for design tools. Registration is first-come-first-served up to 140 students, then apply for one of 60 additional spots by 8pm on September 9. Website: http://cs.brown.edu/courses/csci1300/
Fall CSCI1300 S01 15885 TTh 6:40-8:00PM(05) (J. Huang)

Explores the visual and human-computer interaction design process for scientific applications in Brown's immersive virtual reality Cave. Joint with RISD. Computer Science and design students learn how to work together effectively; study the process of design; learn about scientific problems; create designs applications; critique, evaluate, realize and iterate designs; and demonstrate final projects. Instructor permission required.
Fall CSCI1370 S01 15892 TTh 10:00-11:50 (D. Laidlaw)

CSCI 1410. Artificial Intelligence.
Practical approaches to designing intelligent systems. Topics include search and optimization, uncertainty, learning, and decision making. Application areas include natural language processing, machine vision, machine learning, and robotics. Prerequisites: CSCI 0160, CSCI 0180 or CSCI 0190; and either CSCI 0220 or one of CSCI 0450 or CSCI 1450. Fall CSCI1410 S01 15891 TTh 1:00-2:20(10) (G. Konidaris)

CSCI 1430. Computer Vision.
How can we program computers to understand the visual world? This course treats vision as inference from noisy and uncertain data and emphasizes probabilistic and statistical approaches. Topics may include perception of 3D scene structure from stereo, motion, and shading; segmentation and grouping; texture analysis; learning, object recognition; tracking and motion estimation. Strongly recommended: basic linear algebra, calculus, and probability.
Fall CSCI1430 S01 15897 MWF 1:00-1:50(06) (J. Tompkin)

CSCI 1570. Design and Analysis of Algorithms.
A single algorithmic improvement can have a greater impact on our ability to solve a problem than years of incremental improvements in CPU speed. We study techniques for designing and analyzing algorithms. Typical problem areas addressed include hashing, searching, dynamic programming, graph algorithms, network flow, and optimization algorithms including linear programming. Prerequisites: CSCI 0160, CSCI 0180, or CSCI 0190, and one of CSCI 0220 or CSCI 1450.
Fall CSCI1570 S01 16488 MWF 2:00-2:50(07) (P. Valiant)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu/).
CSCI 1600. Real-Time and Embedded Software.
Comprehensive introduction to the design and implementation of software for programmable embedded computing systems, those enclosed in devices such as cellular phones, game consoles, and car engines. Includes the overall embedded real-time software design and development processes, as well as aspects of embedded hardware and real-time, small-footprint operating systems. Major project component. Prerequisites: CSCI 0320 or 0330.
Fall CSCI1600 S01 15903 MW 11:00-11:50(16) (S. Reiss)

CSCI 1680. Computer Networks.
Covers the technologies supporting the Internet, from Ethernet and WiFi through the routing protocols that govern the flow of traffic and the web technologies that are generating most of it. A major concern is understanding the protocols used on the Internet: what the issues are, how they work, their shortcomings, and what improvements are on the horizon. Prerequisite: CSCI 0330 or consent of instructor.
Fall CSCI1680 S01 16489 TTh 10:30-11:50(13) (R. Fonseca)

CSCI 1730. Design and Implementation of Programming Languages.
Explores the principles of modern programming languages by implementation. Examines linguistic features, especially control operators such as first-class functions, exceptions, and continuations. Studies data and their types, including polymorphism, type inference, and type soundness. Examines compiler and run-time system topics: continuation-passing style and garbage collection. Prerequisite: CSCI 0160, CSCI 0180 or CSCI 0190. Preferred: CSCI 0220, either CSCI 0320 or CSCI 0330, and CSCI 0510.
Fall CSCI1730 S01 15898 MWF 11:00-11:50(16) (S. Krishnamurthi)

CSCI 1760. Multiprocessor Synchronization.
This course examines the theory and practice of multiprocessor synchronization. Subjects covered include multiprocessor architecture, mutual exclusion, wait-free and lock-free synchronization, spin locks, monitors, load balancing, concurrent data structures, and transactional synchronization. Prerequisites: CSCI 0330
Fall CSCI1760 S01 15884 TTh 1-2:20(10) (M. Herlihy)

CSCI 1810. Computational Molecular Biology.
High-throughput experimental approaches now allow molecular biologists to make large-scale measurements of DNA, RNA, and protein, the three fundamental molecules of the cell. The resulting datasets are often too large for manual analysis and demand computational techniques. This course introduces algorithms for sequence comparison and alignment; molecular evolution and phylogenetics; DNA/RNA sequencing and assembly; recognition of genes and regulatory elements; and RNA and protein structure. The course demonstrates how to model biological problems in terms of computer science.
Prerequisites: CSCI 0160, CSCI 0180 or CSCI 0190, or consent of instructor.
Fall CSCI1810 S01 15887 TTh 2:30-3:50(03) (S. Istrail)

CSCI 1951C. Designing Humanity Centered Robots.
Offered by Brown's Computer Science department under the auspices of the Humanity Centered Robotics Initiative. It is focused on the iterative design process and how it can be used to develop robots for solving tasks that help people. It will expose students to a suite of fabrication and prototyping technologies sufficient for creating a functioning robotic system.
https://www.youtube.com/watch?v=Dbvis1_b78
The course has two tracks, one intended for CS concentrators, and one intended for non-concentrators with previous design experience. The non-concentrator track cannot be used toward fulfilling a Computer Science concentration requirement.
Fall CSCI1951C S01 16493 MW 9:00-11:50 (I. Gonshey)

Independent study in various branches of Computer Science. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

CSCI 1971. Independent Study in 2D Game Engines.
Covers core techniques used in the development 2D game engines. Projects involve building different varieties of 2D game engines as well as games that require use of the features implemented in the engines. Topics include high-level engine design, vector and raster graphics, animation, collision detection, physics, content management, and game AI. Prerequisite: CSCI 0160, 0180, or 0190.
Fall CSCI1971 S01 14965 TTh 'To Be Arranged'

CSCI 1972. Topics in 3D Game Engine Development.
Covers core techniques in 3D game development with an emphasis on engine architecture. Students independently develop their own engines using C++, OpenGL, and the Qt framework, then work in groups to create a polished game. Topics include: spatial subdivision, player representation, collision detection and response, game networking, GPUs, and OpenGL. Prerequisite: CSCI 1230 and one of the following CSCI 0320, CSCI 0330, CSCI 1950N, OR CSCI 1971.
Fall CSCI1972 S01 15898 TTh 'To Be Arranged'


CSCI 2450. Exchange Scholar Program.
Fall CSCI2450 S01 14963 Arranged 'To Be Arranged'

CSCI 2890. Comprehensive Examination Preparation.
Fall CSCI2890 S01 14964 Arranged 'To Be Arranged'
Spr CSCI2890 S01 23992 Arranged 'To Be Arranged'

CSCI 2951E. Topics in Computer Systems Security.
This course explores advanced topics and highlights current research in computer security from a systems perspective. Topics include vulnerabilities and defenses for automotive, computing, medical, and industrial control devices, intrusion detection, botnets, secure network protocols, web spam, tracking of web users, JavaScript sandboxing, attacks and defenses for web applications, and security and privacy issues in cloud computing. Research papers and industry reports will be presented and discussed. Also, hands-on experiments and system demonstrations will be performed. CSCI 1660 or equivalent background is essential. Enrollment limited to 12. Instructor permission required.
Fall CSCI2951E S01 15896 TTh 2:30-5:00 (R. Tamassia)

CSCI 2951F. Learning and Sequential Decision Making.
The course explores automated decision making from a computer-science perspective. It examines efficient algorithms, where they exist, for single-agent and multiagent planning as well as approaches to learning near-optimal decisions from experience. Topics will include Markov decision processes, stochastic and repeated games, partially observable Markov decision processes, and reinforcement learning. Of particular interest will be issues of generalization, exploration, and representation. Each student will be expected to present a published research paper and will participate in a group programming project. Prerequisite: a graduate-level computer science course and some exposure to reinforcement learning from a previous computer-science class or seminar.
Fall CSCI2951F S01 15893 TTh 2:30-3:50(03) (M. Littman)

CSCI 2980. Reading and Research.

CSCI 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a preliminary dissertation. Prerequisite: CSCI 1971. Arrangement of space and time vary by instructor.
Fall CSCI2990 S01 14965 Arranged 'To Be Arranged'
Spr CSCI2990 S01 23992 Arranged 'To Be Arranged'

CSCI XLIST. Courses of Interest to Concentrators in Computer Science.

Development Studies

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Reserved for Development Studies seniors.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Academic Standing.

be approved by both the academic department and the Committee on
when they have not met the tuition requirement and are
or permission of instructor.
be on file with the academic department and the Committee on
advanced-level course offering comprehensive work on all four language skills, with a focus on developing
that course. This course is primarily designed for Chinese heritage students who have

East Asian Studies

Chinese

CHIN 0100. Basic Chinese.

A year-long introduction to Standard Chinese (Mandarin). Speaking, reading, writing, and grammar. Five classroom meetings weekly. This is

CHIN 0200. Basic Chinese.

A year-long introduction to Standard Chinese (Mandarin). Speaking, reading, writing, and grammar. Five classroom meetings weekly. This is

CHIN 0300. Intermediate Chinese.

An intermediate course in Standard Chinese designed to further


This course is designed to enhance listening, speaking, reading, and writing skills for Chinese heritage students who have some prior knowledge of Chinese. Five classroom meetings weekly. Placement interview required.

CHIN 0400. Intermediate Chinese.

An intermediate course in Standard Chinese designed to further

CHIN 0500. Advanced Modern Chinese I.

An advanced course designed to enable students to read authentic materials. Students enhance their listening, speaking, reading, and writing skills; improve their narrative and descriptive abilities; and learn to express abstract ideas both orally and in writing. Five classroom meetings weekly. Prerequisite: CHIN 0250 or CHIN 0400 or permission of instructor.

CHIN 0600. Advanced Modern Chinese II.

An advanced course designed to enable students to read authentic materials. Students enhance their listening, speaking, reading, and writing skills; improve their narrative and descriptive abilities; and learn to express abstract ideas both orally and in writing. Five classroom meetings weekly. Prerequisite: CHIN 0500 or permission of instructor.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CHIN 0800. Advanced Modern Chinese II. See Advanced Modern Chinese II (CHIN 0700) for course description. Prerequisite: CHIN 0700 or permission of instructor.
Spr CHIN0800 S01 24285 TTh 10:30-11:50(03) (L. Hu)
Spr CHIN0800 S01 24285 MWF 10:00-10:50(03) (L. Hu)

CHIN 0910B. Introduction to Classical Chinese. This course aims to build on basic knowledge of reading Classical Chinese grammar, syntax, and vocabulary, and to catch a glimpse of ancient Chinese wisdom. The class will use modern Chinese (Mandarin) to discuss classical texts. Readings are original works of prose and poetry dating from the 2nd to 12th century. Prerequisite: CHIN 600. Instructor permission required.
Spr CHIN0910B S01 24287 TTh 10:30-11:50(09) (W. Chen)

CHIN 0920C. The Changing Face of China: Advanced Reading in Chinese Media. This course is designed to help students develop advanced reading proficiency and formal oral and writing communication skills. Students will listen and read up-to-date news, reports and commentaries from various Chinese media sources, such as TV broadcasts, newspapers, magazines, and websites. Through reading and discussion, students will gain a better understanding of a wide range of current issues in a rapidly changing China, including economics, politics, education and popular culture. Class format varies from lecture, discussion, debate, and group and/or individual presentations. Prerequisites: CHIN0800 or the equivalent.
Spr CHIN0920C S01 24286 TTh 2:30-3:50(11) (Y. Wang)

CHIN 0920G. Chinese Language in the Big Screen. This course is designed for advanced Chinese language students who have completed CHIN 0600 or equivalent. You will gain language and culture proficiency through studying different genres of movies that reflect Chinese history, social issues and Chinese people's values. The primary objective of this course is to further develop your language proficiency in meaningful and entertaining contexts. By conducting research into the films, creating video summary, and sharing your work with your fellow students, you will build up your interpretive and presentational skills. In place of a final written exam, you will be asked to produce a mini-film.
Fall CHIN0920G S01 16072 TTh 2:30-3:50(03) (L. Hu)
Fall CHIN0920G S01 16072 M 2:00-2:50(03) (L. Hu)

CHIN 1040. Modern Chinese Literature. Introduces students to the most representative writers in 20th century China. Emphasizes textual and historical analyses. Major issues include Westernization, nationalism, revolution, class, gender, and literary innovations. Designated primarily as a literature course, rather than language class, and conducted entirely in Mandarin Chinese. Prerequisite: CHIN 0800. Instructor permission required.
Fall CHIN1040 S01 15243 TTh 2:30-3:50(03) (L. Wang)

CHIN 1910. Independent Study. Reading materials for research in Chinese. Sections numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

CHIN 2450. Exchange Scholar Program. Fall CHIN2450 S01 14955 'To Be Arranged'

East Asian Studies

EAST 0180. Japan: Nature, Ritual, and the Arts. This course is an introduction to Japanese culture and aesthetics as represented in pre-modern literature, drama, tea practices, landscape and the fine arts. Recurring themes include Japanese attitudes toward the natural world; traditional conceptions of beauty; and the function of ritual in artistic cultivation. The course is designed for students who have no previous exposure to Japanese studies at the college level; no prerequisites.
Fall EAST0180 S01 15252 MWF 2:00-2:50(07) 'To Be Arranged'

EAST 0350. Pop and Political: Modern Culture in Japan and the Koreas. This course introduces the modern cultures of Japan and Korea through an examination of events, artifacts, and cultural practices. With a broad understanding of culture as a general process of artistic and intellectual development, as a body of material artifacts, and as a social practice of ordinary life, we'll focus our attention on the implications of studying culture in relation to popular media and political activism. Topics covered will include: colonial fiction, the re-creation of tradition, the proletarian arts, postwar children's culture, the globalization of popular music, myth in the DPRK, shojō print culture, and East Asian activism.
Fall EAST350 S01 16709 TTh 1:00-2:20(10) (S. Perry)

EAST 0500. Childhood and Culture in Japan. This seminar offers students an interdisciplinary look at how children became central to social life in modern Japan. What set of historical and philosophical conditions made childhood newly visible in the late 19th century? In what ways has the relationship between the marketplace and childhood evolved over the past hundred years? How have class, gender, ethnicity and sexuality influenced the ways childhood has been experienced in Japan? Students will analyze different texts for and about children (early fairy tales, comic books, propaganda, animation) in relation to critical essays drawn from the disciplines of literature, history, anthropology, film, and social development. SOPH DPLL WRIT
Spr EAST0500 S01 24289 Th 4:00-6:30(17) (S. Perry)

EAST 0600. Literature and Social Inequality in Late Imperial China. This course explores the social inequality and resistant movements represented in fiction, prose and poetry written in late imperial China. We will read literary works to investigate the inequalities sustained or challenged in five social arenas, namely socioeconomic class, gender, urban/rural division, ethnic distinction, and China/foreign difference. The balanced selection of readings in three major literary genres, written by male and female authors, cover topics including a social uprising, religious cult, legal trial, civil examination, courtesan culture, urban market, multilingual court, diplomacy, and travel. Prerequisites: None.
Fall EAST0600 S01 15655 TTh 6:40-8:00PM(05) (K. Chen)

EAST 0610. Popular Culture across Media in Early Modern China. This course introduces popular culture at the intersection of literature, book illustration, and theatrical performance in early modern China. It provides ways for students to study Chinese popular culture through channels of self-expression, political action, ideological propaganda, community building, and religious ritual. The class combines a close analysis of literary and visual works with an introduction to the social and technical milieu of their production and consumption. We will discuss writing topics including a middle-brow entrepreneur, polymath dramatist, scenes depicted in illustrations and on porcelain, regional theater, women's ballads, performances for deities, and court drama. DPLL Spr EAST0610 S01 24531 TTh 6:40-8:00PM(18) (K. Chen)

EAST 0650. Language, Culture, and Society: Korea. This course aims to look into the interaction between language, culture and society. It will specifically examine the role of language in myriad social contexts with special focus on Korean society. Topics to be covered in this course include language contact (e.g. with Japan and China), language variation (e.g. regional, generational, gender), language and identity, language and social class, language perceptions and attitudes, language education in a social context, and so on. Knowledge of the Korean language is preferred but not required. FYS Spr EAST0650 S01 24293 W 3:00-5:30(14) (H. Wang)
EAST 1060. Manly Men, Womanly Women, and Other Variations: The Quest for Becoming in Pre-Modern Chinese Lit.
In this, we will study representative works of Chinese poetry, historical narrative, fiction, and drama, translated into English, in order to understand how Chinese people through the ages approached the task of defining what it means to be human—what constitutes an ideal person, how the ideal changes with the person’s sex, and the degree to which individuals shape and are shaped by the collective they live in. We will read these texts as works of art while also using them to compose a picture of Chinese society as it evolved from the earliest times to the end of the Imperial era. DPLL
Spr EAST1060 S01 24295 MWF 2:00-2:50(07) 'To Be Arranged'

EAST 1070. China Modern: An Introduction to the Literature of Twentieth-Century China.
A general introduction to modern and contemporary Chinese literature from the May Fourth Movement to contemporary Taiwan and the People’s Republic of China. Emphasizes reading of literary works in relation to topics such as cultural tradition, modernity, nationalism, revolution, class, gender, region, cultural commodification, and literary innovations. Readings in English. No previous knowledge of Chinese required.
Fall EAST1070 S01 15242 TTh 1:00-2:20(10) (L. Wang)

EAST 1230. Edo Woodblock Printing.
This course provides an introduction to Japanese art and cultural history through a survey of woodblock print media from its emergence in the mid-17th century to the end of the early modern era. Topics for consideration include East Asian pictorial traditions, the publishing industry, censorship, social identity, and specialist print communities. The course will track the development of Japanese woodblock printing from its origins in printed books and monochrome prints, and the transition to hand-coloring and multi-colored print that facilitated a highly nuanced media form, via the publishing industry’s shifting relationship with the authorities, and influences from China and the West. DPLL
Fall EAST1230 S01 15247 T 4:00-6:30(09) 'To Be Arranged'
Spr EAST1230 S01 24294 T 4:00-6:30(16) 'To Be Arranged'

This is a critical introduction to the history of mainland Chinese film. It focuses on three dimensions of cinematic practice: the historical context of film productions, the specific context/form of each film, and the critical reception of Chinese films in film studies. Important themes such as nation, visual modernity, cinematic narrative, and commercialism will be studied across the three dimensions.
Spr EAST1270 S01 24292 TTh 2:30-3:50(11) (L. Wang)

EAST 1500. Returnees in China’s Modernization.
This course examines the impact on contemporary China of returnees, people who having left China to study abroad have now returned home and become reintegrated into society. Focusing on a series of in-depth studies of returnees who have carved out professional identities in the commercial world, the state, and civil society. The returnee experience will be examined from 2 angles: the manner by which contemporary returnees negotiate Chinese tradition and Western learning, and the differences between this cohort’s experience and that of previous generations of returnees in China’s new century and a half long period of modernization.
Spr EAST1500 S01 24288 T 4:00-6:30(16) (Z. Li)

This course traces the historical evolution of modern Chinese, commonly known as Mandarin. We will examine the uniqueness of Chinese characters, and explore their relationship to other features of the language, including word formation, phonology, grammar, and dialects. The goal will be to understand the manner by which the written script has become so central to the development of Chinese civilization.
Fall EAST1510 S01 15239 M 3:00-5:30(15) (Z. Li)

EAST 1910. Independent Study.
Sections numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EAST 1930. Reading and Writing of the Honors Thesis.
Prior admission to honors candidacy required. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EAST 1940. Reading and Writing of the Honors Thesis.
Prior admission to honors candidacy required. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EAST 1940A. Crafting Early Modern China: Handicraft, Witchcraft and Statecraft.
This course examines how Chinese cultural industry was shaped by socio-political institutions and religious practice between 1400 and 1900 CE. The course highlights the concept of craft, broadly understood as the ways of making artifacts and building social community by using environmental resources and through micro-political negotiations in everyday life. The course aims to equip students in ways to decipher the political, religious and gendered significance embedded in cultural products, including literature and decorative arts. We will explore artifacts from the following categories: literary illustration, painting and calligraphy, seals, ceramics, furniture, and textiles. Prerequisites: None. DPLL
Fall EAST1940A S01 15617 W 3:00-5:30(17) (K. Chen)

EAST 1950B. Chinese Women, Gender and Feminism from Historical and Transnational Perspectives.
This seminar course is designed to critically re-evaluate (re)presentations of Chinese women, gender, and feminism in historical, literary, and academic discourses. It examines a diverse body of texts produced through different historical periods and in different geopolitical locations. It emphasizes gender as both a historical construct(s) among competing discourses and as a material process of individual embodiment and disembodiment. The goal of the course is to help advanced students understand Chinese history from a distinctly gendered perspective, to recognize women’s roles in history and writing, and to develop a reflective, cross-cultural approach to gender, politics, and the self.
Spr EAST1950B S01 24291 M 3:00-5:30(13) (L. Wang)

This course explores the theory and practice of translation in the context of Korean cultural production. Each week we shall grapple with a particular issue in translation studies in dialogue with a Korean-language text. By the end of this course students should be able to locate the tools necessary to carry out translations from Korean to English, to demonstrate an understanding of translation as a craft with its own standards, responsibilities, and complexities, and to have completed a significant translation project themselves. Advanced learners of the Korean language as well as native speakers of Korean are welcome. DPLL
Fall EAST1950W S01 15240 Th 4:00-6:30(04) (S. Perry)

EAST 1951. Literature and Technology in Early Modern China.
This course explores relations between Chinese literature and technical know-how from 1368 to 1911. Introducing recent scholarship in the history of science and technology, the course challenges students to re-define technology in the context of China’s changing Confucian education system, booming market economy, and the multithenic empire. We will investigate the ways in which knowledge about medicine, handicrafts, and foreign lands transformed the form and content of poetry, novels, and belle-lettres. Topics include a merchant’s encyclopaedia, carpenters’ spell, Confucian engineers’ autofiction, novel medicine, and female scholars. Prerequisites: None. DPLL
Spr EAST1951 S01 24533 W 3:00-5:30(14) (K. Chen)

EAST 1990. Senior Reading and Research: Selected Topics.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EAST 2450. Exchange Scholar Program.

EAST XLIST. Courses of Interest to Concentrators.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Japanese

JAPN 0100. Basic Japanese.
Introduction to Japanese language. Emphasizes the attainment of good spoken control of Japanese and develops a foundation of literacy. No prerequisites. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special written permission. The final grade submitted at the end of the course work in JAPN 0200 covers the entire year and is recorded as the final grade for both semesters. The East Asian Studies department wishes to provide language instruction to all interested students. If you are unable to register for this course due to enrollment limits but are dedicated to learning Japanese, please contact the instructor via email.

- Fall JAPN0100 S01 15227 MWF 9:00-9:50(01) (Y. Jackson)
- Fall JAPN0100 S01 15227 TTh 9:00-10:20(01) (Y. Jackson)
- Fall JAPN0100 S02 15228 MWF 10:00-10:50(14) (Y. Jackson)
- Fall JAPN0100 S02 15228 TTh 10:30-11:50(14) (Y. Jackson)
- Fall JAPN0100 S03 15229 MWF 1:00-1:50(06) (Y. Jackson)
- Fall JAPN0100 S03 15229 TTh 1:00-2:20(06) (Y. Jackson)

Designed for those who have had high-school Japanese or other Japanese language experience. An opportunity to organize previous knowledge of Japanese and develop a firm basis of spoken and written Japanese. Prerequisite: Reading and writing knowledge of Hiragana, Katakana, and some Kanji. Placement test required. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special written permission. The final grade submitted at the end of the course work in JAPN 0250 covers the entire year and is recorded as the final grade for both semesters. The East Asian Studies department wishes to provide language instruction to all interested students. If you are unable to register for this course due to enrollment limits but are dedicated to learning Japanese, please contact the instructor via email.

- Fall JAPN0105 S01 15230 MWF 11:00-11:50(16) (K. Yamashita)
- Fall JAPN0105 S01 15230 TTh 9:00-10:20(16) (K. Yamashita)

JAPN 0200. Basic Japanese.
Introduction to Japanese language. Emphasizes the attainment of good spoken control of Japanese and develops a foundation of literacy. This is the second half of a year-long course. Students must have taken JAPN 0100 to receive credit for this course. The final grade for this course will become the final grade for JAPN 0100. If JAPN 0100 was taken for credit then this course must be taken for credit; if taken as an audit, this course must also be taken as an audit. Exceptions to this policy must be approved by both the academic department and the Committee on Academic Standing. The East Asian Studies department wishes to provide language instruction to all interested students. If you are unable to register for this course due to enrollment limits but are dedicated to learning Japanese, please contact the instructor via email.

- Spr JAPN0200 S01 24296 MWF 9:00-9:50(02) (Y. Jackson)
- Spr JAPN0200 S01 24296 TTh 9:00-10:20(02) (Y. Jackson)
- Spr JAPN0200 S02 24297 MWF 10:00-10:50(03) (Y. Jackson)
- Spr JAPN0200 S02 24297 TTh 10:30-11:50(03) (Y. Jackson)
- Spr JAPN0200 S03 24298 MWF 1:00-1:50(06) (Y. Jackson)
- Spr JAPN0200 S03 24298 TTh 1:00-2:20(06) (Y. Jackson)

Designed for those who have had high-school Japanese or other Japanese language experience. An opportunity to organize previous knowledge of Japanese and develop a firm basis of spoken and written Japanese. Prerequisite: Reading and writing knowledge of Hiragana, Katakana and some Kanji. Placement test required. This is the second half of a year-long course. Students must have taken JAPN 0150 to receive credit for this course. The final grade for this course will become the final grade for JAPN 0150. If JAPN 0150 was taken for credit then this course must be taken for credit; if taken as an audit, this course must also be taken as an audit. Exceptions to this policy must be approved by both the academic department and the Committee on Academic Standing. The East Asian Studies department wishes to provide language instruction to all interested students. If you are unable to register for this course due to enrollment limits but are dedicated to learning Japanese, please contact the instructor via email.

- Spr JAPN0250 S01 24299 MWF 11:00-11:50(04) (K. Yamashita)
- Spr JAPN0250 S01 24299 TTh 9:00-10:20(04) (K. Yamashita)

Further practice of patterns and structures of the language. Readings are introduced on aspects of Japanese culture and society to develop reading and writing skills, enhance vocabulary, and provide points of departure for conversation in Japanese. Prerequisite: JAPN 0200 or equivalent. The East Asian Studies department wishes to provide language instruction to all interested students. If you are unable to register for this course due to enrollment limits but are dedicated to learning Japanese, please contact the instructor via email.

- Fall JAPN0300 S01 15231 MWF 11:00-11:50(16) (H. Tajima)
- Fall JAPN0300 S01 15231 TTh 2:30-3:50(16) (H. Tajima)
- Fall JAPN0300 S02 15232 MWF 12:00-12:50(12) (H. Tajima)
- Fall JAPN0300 S02 15232 TTh 12:00-12:50(12) (H. Tajima)

See Intermediate Japanese (JAPN 0300) for course description. Prerequisite: JAPN 0300 or equivalent. Enrollment limited to 18.

- Spr JAPN0400 S01 24300 MWF 11:00-11:50(04) (H. Tajima)
- Spr JAPN0400 S01 24300 TTh 2:30-3:50(04) (H. Tajima)
- Spr JAPN0400 S02 24301 MWF 12:00-12:50(05) (H. Tajima)
- Spr JAPN0400 S02 24301 TTh 12:00-12:50(05) (H. Tajima)

JAPN 0500. Advanced Japanese I.
Continued practice in reading, writing, and speaking. Emphasizes the development of reading proficiency and speaking in cultural contexts. Students read actual articles and selections from Japanese newspapers. Course includes translation, with writing and discussion in Japanese. Films and video tapes are shown as supplementary materials. Prerequisite: JAPN 0400 or equivalent.

- Fall JAPN0500 S01 15233 MWF 12:00-12:50(14) (Y. Jackson)
- Fall JAPN0500 S01 15233 TTh 10:00-10:50(14) (Y. Jackson)

JAPN 0600. Advanced Japanese I.
See Advanced Japanese I (JAPN 0500) for course description.

- Spr JAPN0600 S01 24302 TTh 12:00-12:50(03) (Y. Jackson)
- Spr JAPN0600 S01 24302 MWF 10:00-10:50(03) (Y. Jackson)

JAPN 0700. Advanced Japanese II.
Reading of articles from Japan’s press with discussion in Japanese. Focuses on explanations and drills on the fine points in grammar and vocabulary as well as on the practice of writing in various styles. Movies and video tapes are used as supplementary materials. Prerequisite: JAPN 0600 or equivalent.

- Fall JAPN0700 S01 15234 MWF 2:00-2:50(07) (H. Tajima)

JAPN 0800. Advanced Japanese II.
See Advanced Japanese II (JAPN 0700) for course description.

Spr JAPN0800 S01 24303 MWF 2:00-2:50(07) (H. Tajima)
KREA 0300. Intermediate Korean.
An intermediate course in Korean designed to further communicative competence in spoken Korean and to provide additional reading practice in stylistically higher level materials that are progressively integrated into the given dialogues. Discussions on various aspects of Korean culture and society. Four classroom hours per week. Prerequisite: KREA 0200 or instructor permission.

KREA 0500. Advanced Korean.
Aims to help students develop an advanced level of communicative competence, with special focus on enhancing their reading comprehension, essay writing, and discourse (discussion and presentation) skills. Authentic reading materials from a variety of sources will be used to introduce various topics and issues pertaining to Korean society and culture, thus students’ cultural understanding will also be enhanced. Prerequisite: KREA 0400 or equivalent or permission of instructor.

KREA 0910B. Media Korean.
Develop linguistic competence and deepen cultural understanding through exposure to a variety of media sources. Built on the Content-based Instruction model and Genre-based Approach. Discuss current Korean affairs and core issues of culture based on assigned materials. Develop reading and listening comprehension skills through pre-class activities, oral proficiency through in-class discussion and presentation, and writing proficiency through assigned essays writings, in addition to various integrative tasks. Tuesday classes will focus on comprehending the text and source materials, Thursday classes will focus on related tasks and activities. Enrollment limited to 20. Conducted entirely in Korean. Fall KREA0910B S01 15244 TTh 10:30-11:50(13) (H. Wang)

KREA 1910. Independent Study.
Reading materials for research in Korean. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Fall KREA0400 S01 24306 MWF 11:00-11:50(04) (H. Ha)
Spr KREA0400 S02 24306 MWF 10:00-11:50(04) (H. Ha)

Fall KREA0100 S01 15235 TTh 9:00-10:20(01) (H. Ha)
Fall KREA0100 S02 15236 MWF 12:00-12:50(12) (H. Ha)
KREA 0910A. Classical Japanese.
This is an introductory course to pre-modern Japanese. It will explore the lifestyle and philosophy of samurai in 17th century Japan through reading the book, Goryō no Sho. The book comprises Miyamoto Musashi’s thoughts on swordplay, winning, and mind training. The course includes reading background information in English and viewing films and dramas. Enrollment limited to 20.

Fall JAPN0910A S01 15241 M 3:00-5:30(15) (K. Yamashita)

This advanced Japanese class offers students the chance to read classic works of modern Japanese literature in the original as we work our way through each decade of the 20th century. We will consider both the formal properties of fiction and the historical pressures of gender, ethnicity, class, imperialism and globalization. Authors include Natsume Soseki, Yukio Mishima, Murakami Haruki, as well as ethnic Korean writers Ch’oe Chōng-hŭi and Yan Sogiru, and others depending on student interest.

Spr JAPN0990 S01 24473 TTh 1:00-2:20(10) (S. Perry)

Introduces a linguistic analysis of Japanese language to attain an overview of structure and a foundation for understanding how grammar relates to various modes of communication. Topics include discourse analysis, pragmatics, communicative intention, communication strategies, and intercultural communication gaps. Linguistic data is drawn from films and fiction. Prerequisite: basic knowledge of Japanese grammar, vocabulary, and linguistics. Enrollment limited to 20. WRIT

Spr JAPN1310 S01 24290 M 3:00-5:30(13) (K. Yamashita)

JAPN 1910. Independent Study.
Reading materials for research in Japanese. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

This advanced Japanese class offers students the chance to read classic works of modern Japanese literature in the original as we work our way through each decade of the 20th century. We will consider both the formal properties of fiction and the historical pressures of gender, ethnicity, class, imperialism and globalization. Authors include Natsume Soseki, Yukio Mishima, Murakami Haruki, as well as ethnic Korean writers Ch’oe Chōng-hŭi and Yan Sogiru, and others depending on student interest.

Spr JAPN1990 S01 24519 TTh 1:00-2:20(10) (S. Perry)
ECON 0110. Principles of Economics.

Extensive coverage of economic issues, institutions, and vocabulary, plus an introduction to economic analysis and its application to current social problems. Required for all economics concentrators. Prerequisite for ECON 1110, 1130, 1210 and 1620. Serves as a general course for students who will take no other economics courses and want a broad introduction to the discipline. Weekly one-hour conference required (conferences are not held during the summer session).

Fall ECON0110 S01 15731 MWF 9:00-9:50(01) (R. Friedberg)
Spr ECON0110 S01 24584 MWF 9:00-9:50(02) (R. Friedberg)

ECON 0170. Essential Mathematics for Economists.

This course teaches the mathematical skills useful for upper level Economics classes. Emphasis is on acquisition of tools, problem solving, intuition, and applications rather than proofs.

This course satisfies the mathematics requirement for the Economics concentration, but does not serve as a prerequisite for upper level courses in Math, Applied Math, or other departments. Students planning further courses in those areas should take MATH 0100 or MATH 0170 (which also satisfy the Economics concentration requirement) instead. Ideally, ECON 0170 should be taken before ECON 1110, or at least simultaneously.

Fall ECON0170 S01 16637 MWF 2:00-2:50(07) (D. Brenner)
Spr ECON0170 S01 25287 MWF 12:00-12:50(05) 'To Be Arranged'


Basic accounting theory and practice. Accounting procedures for various forms of business organizations.

Fall ECON0710 S01 15755 MW 6:00-7:30 (R. D’Andrea)
Fall ECON0710 S02 15756 TTh 6:00-7:30 (P. Dal Bo)
Spr ECON0710 S01 24606 MW 6:00-7:30 (R. D’Andrea)
Spr ECON0710 S02 24607 TTh 6:00-7:30 (T. Lonardo)

ECON 1110. Intermediate Microeconomics.

Tools for use in microeconomic analysis, with some public policy applications. Theory of consumer demand, theories of the firm, market behavior, welfare economics, and general equilibrium. Prerequisite: MATH 0060, 0070, 0090, 0100, 0170, 0180, 0190, 0200, or 0350; and ECON 0110; or advanced placement.

Fall ECON1110 S01 15757 TTh 9:00-10:20(08) 'To Be Arranged'
Fall ECON1110 S02 15759 MWF 9:00-9:50(01) (P. Dal Bo)
Fall ECON1110 S03 15760 MWF 10:00-10:50(14) (P. Dal Bo)
Spr ECON1110 S01 24608 MWF 9:00-9:50(02) (L. Barrage)
Spr ECON1110 S02 24610 TTh 9:00-10:20(01) 'To Be Arranged'

ECON 1130. Intermediate Microeconomics (Mathematical).

Microeconomic theory: Theories of the consumer and firm, competitive market, imperfect competition, game theory, welfare economics, general equilibrium. May not be taken in addition to ECON 1110. Prerequisite: MATH 0100, 0170, 0180, 0190, 0200, or 0350; and ECON 0110; or advanced placement.

Fall ECON1130 S01 15761 MWF 11:00-11:50(16) (R. Vohra)
Spr ECON1130 S01 25016 MWF 1:00-1:50(06) 'To Be Arranged'

ECON 1210. Intermediate Macroeconomics.

The economy as a whole: Level and growth of national income, inflation, unemployment, role of government policy. Prerequisite: MATH 0060, 0070, 0090, 0100, 0170, 0180, 0190, 0200, or 0350; and ECON 0110; or advanced placement.

Fall ECON1210 S01 15763 MWF 1:00-1:50(06) (P. Michailiadis)
Fall ECON1210 S02 15765 MWF 2:00-2:50(13) (P. Michailiadis)
Spr ECON1210 S01 25017 TTh 9:00-10:20(01) (N. Mehrotra)
Spr ECON1210 S02 25018 TTh 1:00-2:20(10) (N. Mehrotra)
Spr ECON1210 S03 25102 MWF 11:00-11:50(04) (S. Michalopoulos)


The course is concerned with macroeconomic policy in the United States, with special focus on the recent economic crisis. The main objective of the course is to introduce students to the type of models and methods used in current research in macroeconomics both in the scholarly literature but also in the practice of central banks and major policy institutions. Events of the financial crisis and the economic recession of 2007-2009 will serve to illustrate the challenges confronted by macroeconomic analysis. Prerequisites: ECON 1110 or 1130; and MATH 0090, 0100, 0170, 0180, 0190, 0200, or 0350; or advanced placement. Enrollment limited to 30.

Spr ECON1225 S01 25100 TTh 1:00-2:20(10) (G. Eggertsson)

ECON 1310. Labor Economics.

Labor supply, human capital, income inequality, discrimination, immigration, unemployment. Prerequisite: ECON 1110 or 1130; and APMA 1650 or CSCI 1450 or ECON 1620 or 1630. Enrollment limited to 100.

DPLL Spr ECON1310 S01 25068 TTh 10:30-11:50(09) (K. Chay)


This course equips students with theoretical and empirical tools to analyze environmental issues from the perspective of economics. First, we review when and why the markets fail, competing policy solutions (e.g., cap-and-trade), and cost-benefit analysis. Second, we survey methods to quantify the benefits of environmental regulations, including revealed and stated preference methods, a primer on climate-economy modeling, and a real-world application in a class research project. Third, we study the costs of environmental regulations. We conclude with advanced policy considerations (e.g., trans-boundary pollutants), private market solutions/corporate social responsibility, and select special topics (e.g., resources and economic development).

Fall ECON1350 S01 16827 TTh 10:30-11:50(13) (L. Barrage)

ECON 1360. Health Economics.

This course introduces students to the issues, theory and practice of health economics in the US. Topics include the economic determinants of health, the market for medical care, the market for health insurance and the role of the government in health care. Course work includes data analyses using the program STATA. Prerequisites: ECON 1110 or 1130; and ECON 1620, 1630, or APMA 1650 or CSCI 1450 or other statistics background. Enrollment limited to 24. DPLL

Spr ECON1360 S01 25084 M 3:00-5:30(13) 'To Be Arranged'

ECON 1370. Race and Inequality in the United States.

We examine racial inequality in the United States, focusing on economic, political, social and historical aspects. Topics include urban poverty, employment discrimination, crime and the criminal justice system, affirmative action, immigration, and low wage labor markets. Black/white relations in the US are the principle but not exclusive concern. Prerequisite: ECON 1110 or 1130. Enrollment limited to 25. DPLL

Fall ECON1370 S01 16358 TTh 10:30-11:50(13) (G. Loury)

ECON 1375. Inequality of Opportunity in the US.

This course examines empirical evidence on inequality of opportunity in the US. We cover recent work in economics that measures the importance of parents, schools, health care, neighborhoods, income, and race in determining children’s long-term labor market success, and implications of these findings for US public policy. We will also place the empirical work in historical and philosophical context and cover a variety of statistical issues. Prerequisites: ECON 1110 or 1130; and ECON 1620, 1629, or 1630. Enrollment limited to 30 seniors.

Fall ECON1375 S01 16754 W 3:00-5:30(17) (N. Hilger)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Positive and normative study of the organizations that comprise and the institutional structures that characterize a modern mixed market economy. Theoretical efficiency and potential limitations of private enterprises and markets including (a) why some market actors are organizations (e.g., companies), (b) effort elicitation problems in organizations, (c) the problem of cooperation in traditional versus behavioral economics, and (d) alternative kinds of organization (including proprietorships, corporations, nonprofits, government agencies). Roles of government, and problems of government failure, including the collective action problem of democracy. State-market balance and contemporary controversies over the economic system in light of the 2008 financial crisis. Enrollment limited to 100 juniors and seniors. Prerequisite: ECON 1110 or 1130.

Fall ECON1450 S01 16751 T Th 2:30-3:50(03) (L. Puterman)

ECON 1460. Industrial Organization.
A study of industry structure and firm conduct and its economic/antitrust implications. Theoretical and empirical examinations of strategic firm interactions in oligopolistic markets, dominant firm behaviors, and entry deterrence by incumbents. Also economics of innovation: research and development activities and government patent policies. Prerequisite: ECON 1110 or 1130. Some knowledge of calculus required. Enrollment limited to 100.

Fall ECON1460 S01 16329 MWF 2:00-2:50(07) (G. Siourounis)

ECON 1480. Public Economics.
This course is an introduction to the economics of the public sector. We will cover theoretical and empirical tools of public economics and apply these tools to a wide range of issues including externalities, public goods, collective choice, social insurance, redistribution and taxation. The course will focus on questions such as: What should government do? How much should governments tax to avoid individuals against misfortune? How much should governments redistribute resources from high-income to low-income households? Throughout the course we will emphasize real-world empirical applications rather than hypothetical examples. DPLL

Spr ECON1480 S01 25472 T Th 2:30-3:50(11) (H. Hilger)

ECON 1486. The Economic Analysis of Political Behavior.
Slow economic growth, controversial policy, and over a decade of continuous war have led many to question the extent to which government is a force for the common good. Blame is often assigned to specific politicians or ideological perspectives. Public choice economics instead analyzes the incentives structure within which political decisions take place, seeking to uncover the forces guiding the behavior of voters, legislators, judges, and other political agents. This course will examine the insights and limitations of the public choice perspective in the context of electoral politics, legislation, bureaucracy and regulation, and constitutional rules. WRIT

Spr ECON1486 S01 25083 W 3:00-5:30(14) (D. Damico)

ECON 1500. Current Global Macroeconomic Challenges.
Analysis of current economic challenges in the U.S., Europe, Japan, and China. Topics include fiscal and monetary policies, international trade, capital flows and exchange rate policy, and policies for long-run growth. Emphasis on macroeconomic policies in the individual nations and their interaction with each other. Prerequisites: ECON 1210. Also recommended: ECON 1550 and 1850. Enrollment limited to 100.

Fall ECON1500 S01 16385 T Th 9:00-10:20(08) 'To Be Arranged'

ECON 1510. Economic Development.
This course is an introduction to development economics and related policy questions. It discusses the measurement of poverty and inequality; growth; population change; health and education; resource allocation and gender; land and agriculture; and credit, insurance, and savings. The course provides a theoretical framework for the economic analysis of specific problems associated with developing economies, and introduces empirical methods used to evaluate policies aimed at solving these problems. By the end of the class, students will be able to discuss some of the "hot topics" in development, like microfinance, family planning, or the problem of "missing women" in South-East Asia. DPLL

Fall ECON1510 S01 16749 MWF 10:00-10:50(14) 'To Be Arranged'

ECON 1540. International Trade.
Theory of comparative advantage, trade, and income distribution. Welfare analysis of trade: gains from trade, evaluation of the effects of trade policy instruments-tariffs, quotas, and subsidies. Trade under imperfect competition. Strategic trade policy. Trade, labor markets, preferential trade agreements, and the world trading systems. Prerequisite: ECON 1110 or 1130. Enrollment limited to 100.

Fall ECON1540 S01 16352 T Th 2:30-3:50(03) (J. Blaum)

ECON 1550. International Finance.
The balance of payments; identification and measurement of surpluses and deficits; international monetary standards; the role of gold and paper money; government policies; free versus fixed exchange rates; international capital movements; war and inflation; the International Monetary Fund. Prerequisite: ECON 1210. Enrollment limited to 100.

Spr ECON1550 S01 25042 MWF 2:00-2:50(07) (G. Siourounis)

ECON 1620. Introduction to Econometrics.
Probability and statistical inference. Estimation and hypothesis testing. Simple and multiple regression analysis. Applications emphasized. Prerequisite: ECON 0110 or advanced placement, or ECON 1110 or ECON 1130, and MAT 0990. Weekly one-hour computer conference required.

Fall ECON1620 S01 15767 T Th 9:00-10:20(08) (B. Knight)
Spr ECON1620 S01 25019 T Th 10:30-11:50(09) (A. McCluskey)

This class will cover the basics of applied research in economics. We will cover how we use economic theory to formulate a hypothesis to test and how we use data to test our hypothesis. As part of the coursework, students will be exposed to topics across multiple fields of applied economic research (e.g., health, labor, political economy, urban economics, development, etc) that can be explored in greater detail in more advanced classes.

Students will read and discuss papers published in professional journals and perform data analysis as part of the course requirements. Prerequisites: ECON 1110 or 1130; and ECON 1620 or 1630.

Fall ECON1629 S01 15777 T Th 10:30-11:50(13) (A. Aizer)
Spr ECON1629 S01 25034 MWF 11:00-11:50(04) 'To Be Arranged'

ECON 1630. Econometrics I.
Advanced introduction to econometrics with applications in finance and economics. How to formulate and test economic questions of interest. The multivariate linear regression model is treated in detail, including tests of the model's underlying assumptions. Other topics include: asymptotic analysis, instrumental variable estimation, and likelihood analysis. Convergence concepts and matrix algebra are used extensively. Prerequisites: ECON 0110 or advanced placement; and ECON 1110 or 1130; and APMA 1650 or CSCI 1450, MATH 1620, or ECON 1620; or equivalent.

Fall ECON1630 S01 15776 T Th 1:00-2:20(10) (S. Schennach)
Spr ECON1630 S01 25028 T Th 1:00-2:20(10) (A. Norets)

ECON 1640. Econometrics II.
Continuation of ECON 1630 with an emphasis on econometric modeling and applications. Includes applied topics from labor, finance, and macroeconomics. Prerequisite: ECON 1630. Enrollment limited to 100.

Fall ECON1640 S01 16322 M W 8:30-9:50(01) (A. McCluskey)

ECON 1660. Big Data.
The spread of information technology has lead to the generation of vast amounts of data on human behavior. This course explores ways to use this data to better understand the societies in which we live. The course weaves together methods from machine learning (OLS, LASSO, trees) and economics (reduced form causal inference, economic theory, structural modeling) to answer real world questions in a sequence of projects. We will use these projects as a backdrop to weigh the importance of causality, precision, and computational efficiency. Knowledge of basic econometrics and programming is assumed.

Spr ECON1660 S01 25099 M W 8:30-9:50(02) 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ECON 1710. Investments I.
The function and operation of asset markets; the determinants of the prices of stocks, bonds, options, and futures; the relations between risk, return, and investment management; the capital asset pricing model, normative portfolio management, and market efficiency. Prerequisite: ECON 1110 or 1130; and ECON 1620 or 1630 or APMA 1650 or CSCI 1450.

Fall 2023:
- ECON1710 S01 15782 MWF 11:00-11:50 (S. Kuo)
- ECON1710 S02 15783 MWF 1:00-1:50 (S. Kuo)
- ECON1710 S03 25039 MW 11:00-11:50 (S. Kuo)
- ECON1710 S04 25040 MWF 1:00-1:50 (S. Kuo)

ECON 1720. Corporate Finance.
A study of theories of decision-making within corporations, with empirical evidence as background. Topics include capital budgeting, risk, securities issuance, capital structure, dividend policy, compensation policy, mergers and acquisitions, real options, financial engineering, securitization. Prerequisite: ECON 1110 or 1130; and ECON 1620 or 1630 or APMA 1650 or CSCI 1450; ECON 1710.

Fall 2023:
- ECON1720 S01 16328 MWF 11:00-11:50 (G. Siourounis)

ECON 1750. Investments II.
Individual securities: forwards, futures, options and basic derivatives, pricing conditions. Financial markets: main empirical features, equity premium and risk-free interest rates, consumption based asset pricing models, stock market participation, international diversification, and topics in behavioral finance. Prerequisites: ECON 1110 or 1130; ECON 1620 or 1630 or APMA 1650 or CSCI 1450; ECON 1710. Enrollment limited to 100.

Fall 2023:
- ECON1750 S01 16750 TTh 10:30-11:50 (K. Rozen)

ECON 1760. Financial Institutions.
This course analyzes the role of financial institutions in allocating resources, managing risk, and exerting corporate governance over firms. After studying interest rate determination, the risk and term structure of interest rates, derivatives, and the role of central banks, it takes an international perspective in examining the emergence, operation, and regulation of financial institutions, especially banks. Prerequisites: ECON 1110 or 1130; and 1210. Enrollment limited to 100.

Fall 2023:
- ECON1760 S01 15793 TTh 2:30-3:50 (To Be Arranged)

Analyzes the role of financial markets and institutions in allocating resources and exerting corporate governance over firms, how regulation shapes finance, and how finance influences the enactment and impact of financial regulation. The class will use: economic theory to develop a solid conceptual framework for understanding how finance affects economic growth, income distribution, and stability; empirical evidence to assess theory; and history to put the role of finance into a long-term framework. Current events will be continuously used to keep the class relevant. Prerequisites: ECON 1110 or 1130; and ECON 1210; and ECON 1630; and ECON 1720 or 1760. Enrollment limited to 30 senior concentrators in Economics, BEO, Applied Math-Economics, Computer Science-Economics, and Math-Economics.

Fall 2023:
- ECON1765 S01 16826 Th 4:00-6:30 (T. Nguyen)

ECON 1820. Behavioral Economics.
This course provides a grounding in the main areas of study within behavioral economics, including temptation and self control, fairness and reciprocity, reference dependence, bounded rationality, happiness and neuroeconomics. For each area of study we begin with the standard model of rational decision making, and discuss what behavior this model can explain. We then discuss the experimental evidence that indicates that the standard model is missing something important, and the models that have sprung up to account for these violations. Finally, we will look at the implications of these new models for our understanding of how the economy operates.

Fall 2023:
- ECON1820 S01 16752 MWF 10:00-10:50 (G. De Clippel)

ECON 1850. Theory of Economic Growth.
Analysis of the fundamental elements that determine economic growth. It examines the role of technological progress, population growth, income inequality, and government policy in the determination of (a) the pattern of economic development within a country, and (b) sustainable differences in per capita income and growth rates across countries. Prerequisites: ECON 1210 and either APMA 0330, 0350 (or equivalent), MATH 0180, 0200, or 0350 (or equivalent). Enrollment limited to 100.

Fall 2023:
- ECON1850 S01 16357 TTh 1:00-2:20 (G. Galor)

ECON 1870. Game Theory and Applications to Economics.
Study of the elements of the theory of games. Non-cooperative games. Repeated games. Cooperative games. Applications include bargaining and oligopoly theory. Prerequisites: ECON 1110 or 1130; and MATH 1000, or 0170, or 0180, or 0190, or 0200, 0350, or advanced placement; and ECON 1620 or 1630 or APMA 1650 or CSCI 1450, or MATH 1610. Enrollment limited to 100.

Fall 2023:
- ECON1870 S01 25474 MW 8:30-9:50 (G. De Clippel)

Students intending to write an honors thesis in economics must register for this class. The goal is to help students with the process of identifying and defining feasible topics, investigating relevant background literature, framing hypotheses, and planning the structure of their thesis. Each student must find a thesis advisor with interests related to their topic and plan to enroll in ECON 1970 during the final semester of senior year.

Note: This course does not count toward Economics concentration credit.

Fall 2023:
- ECON1960 S01 15790 M 3:00-5:30 (K. Chay)

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Techniques of mathematical analysis useful in economic theory and econometrics. Linear algebra, constrained maximization, difference and differential equations, calculus of variations. Fall 2023:
- ECON2010 S01 15786 MW 1:00-2:20 (To Be Arranged)

This course provides students with skills needed to integrate economic theory, econometric methods, and data management in the analysis of economic problems. Provides a hands-on perspective including assignments designed to derive testable propositions from simple economic models, illustrate the loading, cleaning and merging of complex survey data, and provide experience in the selection and interpretation of basic econometric methods.

Fall 2023:
- ECON2020 S01 25030 MW 10:30-11:50 (To Be Arranged)

ECON 2030. Introduction to Econometrics I.
The probabilistic and statistical basis of inference in econometrics. Fall 2023:
- ECON2030 S01 15787 MW 10:30-11:50 (E. Renault)

ECON 2040. Econometric Methods.
Applications of mathematical statistics in economics. The nature of economic observations, cross-section and time series analysis, the analysis of variance and regression analysis, problems of estimation. Fall 2023:
- ECON2040 S01 25031 TTh 9:00-10:20 (A. Norets)

ECON 2050. Microeconomics I.
Decision theory: consumer's and producer's theory; general competitive equilibrium and welfare economics: the Arrow-Debreu-McKenzie model; social choice and implementation. Fall 2023:
- ECON2050 S01 15788 TTh 1:00-2:20 (R. Vohra)

ECON 2060. Microeconomics II.
Economics of imperfect information: expected utility, risk and risk aversion, optimization under uncertainty, moral hazard, and self-selection problems. Economics of imperfect competition: monopoly; price discrimination; monopolistic competition; market structure in single shot, repeated and stage games; and vertical differentiation. Fall 2023:
- ECON2060 S01 25032 MW 1:00-2:20 (K. Rozen)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ECON 2070. Macroeconomics I. Consumption and saving, under both certainty and uncertainty; theory of economic growth; real business cycles; investment, and asset pricing. Fall ECON2070 S01 15789 TTh 10:30-11:50(13) (O. Galor)

ECON 2080. Macroeconomics II. Money, inflation, economic fluctuations and nominal rigidities, monetary and fiscal policy, investment, unemployment, and search and coordination failure. Spr ECON2080 S01 25033 TTh 10:30-11:50(09) (G. Eggersson)


ECON 2260. Political Economy I. This first course in political economy provides theoretical and empirical coverage of the application of economic analysis to political behavior and institutions. This course is designed for students wishing to specialize in political economy but may also be useful for students specializing in related areas, such as development economics and macroeconomics. After starting with a basic overview of candidates and voters, we then turn to specific topics in the areas of electoral systems, legislatures and legislative bargaining, the role of the media, local public finance, and fiscal federalism. Fall ECON2260 S01 16753 TTh 9:00-10:20(08) (B. Knight)

ECON 2320. Economics of Labor and Population. This course examines identification issues in empirical microeconomics. Focus on the sensible application of econometric methods to empirical problems in economics and policy research -- particularly labor and population economics. The course examines issues that arise when analyzing non-experimental data and provides a guide for tools that are useful for applied research. The course also emphasizes how a basic understanding of theory and institutions can help inform the analysis. By the end of the course, students should have a firm grasp of the types of research designs and methods that can lead to convincing analysis and be comfortable working with large-scale data sets. Fall ECON2320 S01 16638 TTh 2:30-3:50(03) (E. Renault)

ECON 2330. Topics in Labor Economics. The course introduces students to procedures used to extract evidence from data and to perform rigorous causal inference in order to evaluate public policy on issues such as schooling, the return to education and returns on late intervention programs. Econometric methods, such as Instrumental Variable, Matching, Control Functions, Self Selection Models and Discrete Choice as well as Panel Data Methods, are discussed in detail. Spr ECON2330 S01 25069 M 9:30-12:00 (K. Chay)

ECON 2360. Economics of Health and Population. An introduction to current research in the economics of health and population. Focuses on studies of empirically-tractable and tested models of individual, household, and firm behaviors and how these behaviors interact through markets and other institutions. Among the subjects considered are the economics of fertility and marriage, the operation of the health services sector, and the implications of population aging. Fall ECON2360 S01 16325 Arranged (A. Aizer)

ECON 2450. Exchange Scholar Program. Fall ECON2450 S01 14967 Arranged "To Be Arranged" Spr ECON2450 S01 23995 Arranged "To Be Arranged"

ECON 2470. Industrial Organization. The focus of this course will be on empirical models for understanding the interactions between firms and consumers in imperfectly competitive markets. Lectures and problem sets will teach canonical models and methods; class discussion will focus on applications of these methods, especially applications outside of traditional areas of industrial organization. Students who take this class will be prepared to conduct research in industrial organization or to "export" methods from industrial organization to other areas of applied microeconomics. Fall ECON2470 S01 16330 Arranged (J. Shapiro)

ECON 2480. Public Economics. Theoretical and empirical analysis of the role of government in private economies. Topics include welfare economics, public goods, externalities, income redistribution, tax revenues, public choice, and fiscal federalism. Spr ECON2480 S01 25478 TTh 10:30-11:50(09) (J. Shapiro)

ECON 2485. Public Economics I. This course covers core issues in the design of optimal government policies, and the empirical analysis of those policies in the world. In addition, this course will familiarize students with the basic empirical methods and theoretical models in applied microeconomics. Emphasis is placed on connecting theory to data to inform economic policy. Specific topics include efficiency costs and incidence of taxation, income and corporate taxation, optimal tax theory, tax expenditures and tax-based transfer programs, welfare analysis in behavioral models, and social security and retirement policy. Fall ECON2485 S01 16354 TTh 9:00-10:20(08) (J. Friedman)

ECON 2530. Behavioral and Experimental Economics. An introduction to the methodology of experimental economics with an emphasis on experiments designed to illuminate problems in organizational design and emergence of institutions, and experiments investigating the operation of social and psychological elements of preference such as altruism, inequality aversion, reciprocity, trust, concern for relative standing, envy, and willingness to punish norm violators. Experiments studied will include ones based on the prisoners' dilemma, dictator game, ultimatum game, and especially the voluntary contribution mechanism (public goods game) and the trust game. Spr ECON2530 S01 25477 TTh 2:30-3:50(11) (L. Puterman)

ECON 2600. Bayesian and Structural Econometrics. This course will cover a number of topics in Bayesian econometrics and estimation of structural dynamic discrete choice models. The Bayesian econometrics part of the course will start with introductory textbook material (Geweke, 2005, Contemporary Bayesian Econometrics and Statistics, denoted by G). A list of 11 topics with corresponding readings is given below. Topics 1-5 will be covered. If time permits, a subset of topics 6-11 determined by interests of the course participants will be covered as well. Readings marked with asterisk * are not required. Fall ECON2600 S01 16324 TTh 1:00-2:20(10) (A. Norets)

ECON 2630. Econometric Theory. Standard and generalized linear models, simultaneous equations, maximum likelihood, Bayesian inference, panel data, nonlinear models, asymptotic theory, discrete choice, and limited dependent variable models. Fall ECON2630 S01 16387 TTh 2:30-3:50(03) (S. Schennach)

ECON 2660. Recent Advances in the Generalized Method of Moments. Method of Moments (GMM) and Empirical Likelihood (EL). Kernel methods for density and regression estimation. Optimal instruments and local EL. Applications to non-linear time series models, Euler equations and asset pricing. Spr ECON2660 S01 25478 TTh 1:00-2:20(10) (E. Renault)

ECON 2830. Dynamic Optimization and Economic Growth. The role of human capital, income distribution, population growth, technological progress, and international trade in the determination of differences in growth performance across countries. Inequality and economic growth. Technological progress and wage inequality. The transition from stagnation to sustained growth. Evolution and growth. Fall ECON2830 S01 16356 F 9:30-12:00 (O. Galor)
ECON 2860. Comparative Development.
Weighing the shadow of history on contemporary economic performance occupies an increasing part of the agenda among growth and development economists. This course will focus on recent contributions in the literature of the historical determinants of comparative development paying particular attention on how to integrate the use of Geographic Information Systems (GIS) in the research inquiry. The goal is to get you thinking about the big historical processes that have shaped the modern world. We will go over background concepts, critically review recent works and talk about new research designs, like that of spatial regression discontinuity.

Spr ECON2860 S01 25103 MW 2:30-3:50 (S. Michalopoulos)

ECON 2890D. Topics in Macroeconomics, Development and Trade.
This is a graduate class that covers selected topics at the intersection of macroeconomics, economic development and trade, for students in the second year of the PhD and above. The leading theme of the class is the determinants of the observed cross-country differences in income per capita and growth rates, with a focus on the long run. We start by reviewing theories where factor markets function perfectly and only aggregates matter. We then move to non-aggregative theories, placing special emphasis on theories of financial frictions. We spend some time studying the stochastic growth model with partially uninsurable idiosyncratic risk.

Fall ECON2890D S01 16422 TTh 9:00-10:20(08) (J. Blaum)

ECON 2980. Reading and Research.
Individual research projects. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ECON 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

Fall ECON2990 S01 14968 Arranged "To Be Arranged"
Spr ECON2990 S01 23996 Arranged "To Be Arranged"

EDUC 0400. The Campus on Fire: American Colleges and Universities in the 1960’s.
Ole Miss, Berkeley, Columbia, and Kent State: just a few of the campus battlegrounds where conflicts over civil rights, the Vietnam War, and other major issues were fought in the 1960’s. Students consult primary and secondary sources about higher education’s role in these conflicts, and why the consequences of its involvement still linger today. Enrollment limited to 20 first year students. FYS WRIT
Spr EDU0400 S01 24086 MWF 11:00-11:50(04) (L. Spoehr)

EDUC 0410A. New Faces, New Challenges: Immigrant Students in U.S. Schools.
What challenges do immigrant students face in adapting to a new system of education? By comparing and contrasting the perspectives education stakeholders--students, teachers, administrators, and parents--this course examines a number of key contributions to the study of the immigrant experience in education, as well as a selection of memoirs and films about the pathways these newcomers take in navigating school and (trans)forming their developing identities. Enrollment limited to 20 first year students. FYS
Spr EDUC0410ES01 24096 W 3:00-5:30(14) (A. Flores)

Introduces perspectives on education based in history, economics, sociology, and political science. Students engage foundational texts in each of these fields, using the insights gained to examine controversial issues in American education policy, including policies to address ethnic disparities in student achievement, test-based accountability, class-size reduction, and school choice. Enrollment limited to 20 first year students. FYS
Spr EDUC0410ES01 24100 TTh 10:30-11:50(09) (J. Tyler)

EDUC 0410F. The Mind, Brain, and Education.
What do the brain and body have to do with learning? How can research findings from the brain and biological sciences inform educational practices? This first-year seminar will involve discussion of current research from multiple disciplines (e.g., education, neuroscience, neurobiology, psychology) on topics such as brain development, stress, sleep, rhythms, and emotion/motivation. Mini-lectures will provide students with a basic appreciation of the brain and basic bioregulatory systems. Students will gain an understanding of methods for studying brain/behavior interactions and explore implications of new biological/brain findings for learning and education during the preschool, elementary, middle-school, and high-school years. Enrollment limited to 20 first year students. FYS Spr EDUC0410F S01 24120 MWF 11:00-11:50(04) (D. Rangel)

Using sources in history, education, and law this course will explore the landmark Supreme Court case of Brown v. Board of Education which found school segregation unconstitutional and challenged the entire foundation of legal segregation. We will explore the legal, political, and social issues that culminated in Brown and examine the development and deployment of remedies, with particular emphasis on school integration and educational equity. We will consider the legacy of Brown for education and explore the meaning of equity in the past and present. Enrollment limited to 20 sophomore students. DPFL WRT WRIT SOEPH
Fall EDUC0610 S01 15114 W 3:00-5:30(17) (T. Steffes)

EDUC 0800. Introduction to Human Development and Education.
Introduces the study of human development and education from infancy through young adulthood. Provides a broad overview of scientific understanding of how children develop and how research is generated in the field. Major topics include biological foundations, mind, cognition, language, emotion, social skills, and moral understanding based on developmental theories and empirical research. The educational implications of research on human development are discussed.

Fall EDC0800 S01 15077 TTh 1:00-2:20(10) (J. Li)

EDUC 0900. Fieldwork and Seminar in Secondary Education.
Combines study of current educational issues with extensive fieldwork that allows the student to observe how these issues translate themselves into reality on a daily basis. Each student reads and discusses recent writing about educational history, theory, and practice, and observes a class in a local school for 32 hours. The final paper synthesizes reading and observations.

Fall EDC0900 S01 15154 M 3:00-5:30(15) "To Be Arranged"

EDUC 0950. Learning About Learning: Classrooms in Context.
This course aims to provide a pedagogical and sociopolitical context for Brown students as they work as volunteers in the Providence Public schools. Through sharing of volunteer placement experiences, the in-class practice of methods, academic inquiry, analysis and reflection, students will develop their understanding of strategies and perspectives that will both improve their effectiveness as volunteers and develop their ability to thoughtfully enter the national dialogue on improving urban schools.
Spr EDC0950 S01 24148 TTh 6:40-8:00PM(18) "To Be Arranged"

EDUC 1010. The Craft of Teaching.
What is the “craft of teaching”? A wide variety of texts are used to investigate the complexity of teaching and learning. Considering current problems as well as reform initiatives, we examine teaching and learning in America from the perspectives of history, public policy, critical theory, sociology, and the arts. Weekly journals and reading critiques; final portfolio presented to the class.
Spr EDC1010 S01 24116 M 3:00-5:30(13) (C. Villareal)
EDUC 1020. The History of American Education.
This course is an introduction to the history of American education with an emphasis on K-12 public schooling. Using primary and secondary sources, we will explore the development of public schools and school systems, debates over aims and curriculum, conflicts over school governance and funding, and struggles for equity and inclusion over time. We will analyze the relationship between schooling, capitalism, and democracy. Finally, in exploring how different generations have defined and tried to solve educational dilemmas, we’ll consider how this history might help us approach education today.
Fall EDUC1020 S01 15113 TTh 10:30-11:50(13) (T. Steffes)

EDUC 1030. Comparative Education.
National systems of formal education, over the past two centuries, have proliferated massively. International organizations, governmental and nongovernmental, have long promoted the universal provision of mass education as central goals in the modern way of life. At the same time, the way children are raised, and the kinds of adults they become, varies considerably. Comparative education seeks to explore this interplay of variety and uniformity. Enrollment limited to 40.
Spr EDUC1030 S01 24482 TTh 2:30-3:50(11) "To Be Arranged"

After many African countries gained political independence in the 1960s, students and teachers sought to transform education. Although relatively few people were well-educated, those who were used their influence to demand social change. Reading work by anthropologists, historians, and African students’ own writings, we will examine the elements of the enduring colonial legacy, such as the language of instruction, and how Africans proposed curricular and structural reforms to “decolonize” education.
Open to students enrolled in semesters 3-8 or by permission of the instructor. DPLL
Fall EDUC1035 S01 15594 T 4:00-6:30(09) "To Be Arranged"

EDUC 1040. Sociology of Education.
While the United States educational system is widely considered the main institution through which the nation delivers on its promise of social mobility, sociologists have long recognized that schools exacerbate – or even produce – social inequality. This course provides an introduction to the application of sociology to questions of education, with a focus on the United States education system. We will ask questions such as: What do schools teach besides academics? How do social class, gender, and racial/ethnic relations shape student experiences? How can we address critical social issues through education policy?
Spr EDUC1040 S01 24118 MWF 9:00-9:50(02) (D. Rangel)

EDUC 1045. Sociology of Higher Education.
American higher education has often been characterized as the great equalizer and, thus, as one of the foundational pillars of the American Dream. In this course students will develop a sociological understanding of higher education, primarily in the United States. Using both theory and empirical evidence, we will explore issues relating to the impact of social factors on higher education. Particular attention will be paid to the role that higher education plays in promoting social mobility as well as social reproduction. Throughout we will ponder what policies might best fulfill the promise of higher education in the U.S.
Fall EDUC1045 S01 16756 MWF 11:00-11:50(16) (D. Rangel)

EDUC 1060. Politics and Public Education.
Who exercises power in public education? This course examines the key institutions (e.g. school districts, states, Congress, and the courts) and actors (e.g. parents, teachers, interest groups, and the general public) shaping American K-12 education in order to understand recent policy trends and their consequences for students. Major policies discussed include school finance, textbook adoption, school accountability, and school choice. Particular attention is given to the federal No Child Left Behind Act of 2001 and debates over its reauthorization. Previous coursework in American politics or public policy is suggested but not required.
Fall EDUC1060 S02 15129 MW 8:30-9:50(01) "To Be Arranged"

EDUC 1070A. Student Teaching: English.
S/NC.
Fall EDUC1070A S01 15090 Arranged (L. Snyder)
Spr EDUC1070AS01 24101 Arranged (L. Snyder)

EDUC 1070B. Student Teaching: History and Social Studies.
S/NC.
Fall EDUC1070BS01 15092 Arranged (C. Villarreal)
Spr EDUC1070BS01 24102 Arranged (C. Villarreal)

EDUC 1070C. Student Teaching: Science.
S/NC.
Fall EDUC1070CS01 15094 Arranged 'To Be Arranged'
Spr EDUC1070CS01 24104 Arranged 'To Be Arranged'

EDUC 1080A. Analysis of Teaching: English.
S/NC.
Fall EDUC1080A S01 15095 W 4:30-7:00 (L. Snyder)
Spr EDUC1080AS01 24105 W 4:30-7:00 (L. Snyder)

EDUC 1080B. Analysis of Teaching: History and Social Studies.
S/NC.
Fall EDUC1080B S01 15096 W 4:30-7:00 (C. Villarreal)
Spr EDUC1080BS01 24106 W 4:30-7:00 (C. Villarreal)

EDUC 1080C. Analysis of Teaching: Science.
S/NC.
Fall EDUC1080C S01 15097 W 4:30-7:00 'To Be Arranged'
Spr EDUC1080CS01 24107 W 4:30-7:00 'To Be Arranged'

EDUC 1100. Introduction to Qualitative Research Methods.
Designed for sophomores or juniors concentrating in education studies, but also open to other undergraduates interested in qualitative research methods. Through readings, class exercises and discussions, and written assignments, examines issues related to the nature of the qualitative research methods that are commonly used in education, psychology, anthropology, and sociology. Enrollment limited to 20.
Fall EDUC1100 S01 15123 M 3:00-5:30(15) (J. Gujarati)

This course provides an introduction to applied statistics for conducting quantitative research in the social sciences, with a focus on education policy. Students will become acquainted with the fundamentals of probability, descriptive and summary statistics, tabular and graphical methods for displaying data, statistical inference, analytic methods for exploring relationships with both categorical and continuous measures, and multivariate regression. Concepts and methods are taught using real-world examples with multiple opportunities for students to apply these methods in practice. The course uses the statistical software program, STATA.
Spr EDUC1110 S01 24089 TTh 2:30-3:50(11) (M. Kraft)
Spr EDUC1110 S02 24090 Arranged 'To Be Arranged'
Spr EDUC1110 S03 24091 Arranged 'To Be Arranged'

EDUC 1130. Economics of Education.
How do we attract good teachers to public schools? What are the economic returns to early-childhood intervention programs? These are just two examples of important education policy questions. This course introduces key concepts of microeconomic theory and uses them to analyze these and other policy questions. Organized around a structured sequence of readings. First year students require instructor permission.
Spr EDUC1130 S01 24098 TTh 9:00-10:20(01) (J. Tyler)

Examines a century of efforts to improve schooling in the U.S., from John Dewey to Theodore Sizer and E.D. Hirsch, from "social efficiency" to charter schools and No Child Left Behind. How have these movements been affected by the historical contexts in which they operated? Have they produced any lasting results? How, if at all, should current reform movements be informed by the experiences of the past? Enrollment limited to 40.
Spr EDUC1200 S01 24129 MWF 8:00-8:50(08) "To Be Arranged"
Both an individual and a collective perspective on adolescence are used to provide an understanding of how this life stage is differently experienced by youth cross-culturally. Readings include theoretical and empirical papers from such areas as psychology, sociology, anthropology, and education.
Spr EDUC1270 S01 24095 MWF 1:00-1:50(06) (A. Flores)

EDUC 1430. Social Psychology of Race, Class, and Gender.
Focuses on the social construction of race, class, and gender and how this construction influences an individual's perception of self and other individuals. Topics include identity development, achievement, motivation, and social-class development. Enrollment limited to 30. WRIT
Fall EDUC1430 S01 15110 MWF 9:00-9:50(01) (D. Rangel)

EDUC 1450. The Psychology of Teaching and Learning.
Seeks both to demystify the process of teaching and to illuminate its complexities. Assists students with such questions as: What shall I teach? How shall I teach it? Will my students respond? What if I have a discipline problem? Focuses on the teaching-learning process and student behavior, as well as research, theory, and illustrations concerned with classroom applications of psychological principles and ideas. Prerequisites: EDUC 0800 or EDUC 1710. Enrollment limited to 50.
Fall EDUC1450 S01 15079 Th 4:00-6:30(04) (A. Flores)

EDUC 1580. Cross-Cultural Perspectives on Child Development.
Focus on role of culture in child development, infancy to young adulthood. Reviews contemporary theories and empirical research to examine various age periods and domains of development. Major topics: infant care, parenting, socialization, gender roles, cognition, moral development, affect, adolescence, and education and schooling in formal and informal settings. Enrollment limited to 50.
Spr EDUC1580 S01 24093 MWF 12:00-12:50(05) (J. Li)

Despite expending significant energy on education reform in this country and globally, most efforts fail to achieve their lofty ambitions, due to their reliance on "silver bullet" strategies and/or poor execution. This course will focus on management approaches to improving school system performance, enabling students to (a) explore key education reform strategies; (b) adopt a senior management mindset through weekly discussion of case studies; and (c) broaden their perspective through use of domestic and global school system examples. The course is appropriate for juniors, seniors and graduate students, who bring an interest in education and a commitment to active classroom discussion. Enrollment limited to 24.
Fall EDUC1630 S01 15127 T 4:00-6:30(09) (A. Moffit)

EDUC 1650. Policy Implementation in Education.
This course offers an "analytical foundation" for students interested in public policy implementation, with particular emphasis on education. Drawing on social science research, the course examines strengths and limitations of several frameworks, including the "policy typology" school of thought, the rational actor paradigm, the institutional analysis, the bargain model, the organizational-bureaucratic model, and the "consumer choice" perspective. Enrollment limited to 20. WRIT
Fall EDUC1650 S01 15080 MWF 10:00-10:50(17) "To Be Arranged"

EDUC 1690. Literacy, Community, and the Arts: Theory into Practice.
An exploration of ways to improve student literacy skills through the performing arts in area schools. Students read about the theory and practice of literacy and the arts, research national and local initiatives, engage in arts activities, and spend time in area classrooms working with local teachers and artists to draft curriculum materials to be used in summer and school-year programs.
Spr EDUC1690 S01 24121 M 3:00-5:30(13) (L. Snyder)

EDUC 1720. Urban Schools in Historical Perspective.
Why did urban schools, widely viewed as the best in the nation in the early twentieth century, become a "problem" to be solved by its end? How have urban schools been shaped by social, economic, and political transformations in cities and by other public policies? How have urban schools changed over time? This course will ask these and other questions to explore how historical perspective can help us better understand urban schools today. We will analyze the impact of changes in demographics, urban renewal and suburban development, the political economy of cities, educational expectations, and demands for equity.
Spr EDUC1720 S01 24119 TTh 1:00-2:20(10) (T. Steffes)

EDUC 1730. American Higher Education in Historical Context.
A study of 350 years of American higher education. The first part traces the growth and development of American higher education from premodern college to the modern research university. The second part examines issues facing higher education today and places them in historical context. Particular attention is given to: the evolution of curriculum; professionalization; student life; and the often competing priorities of teaching, research and service. WRIT
Spr EDUC1730 S01 24087 MWF 2:00-2:50(07) (L. Speohr)

EDUC 1850. Moral Development and Education.
Examines contending approaches to moral development and its fostering in the home, school and peer group. Topics include philosophical underpinnings of moral theory, cognitive and behavioral dynamics of moral growth, values climate of contemporary American society, the role of schooling, and variations attributable to culture and gender. Prerequisites: EDUC 0800, 1270, or 1710, or CLPS 0610 (COGS 0630), or CLPS 0600 (PSYC 0810). Enrollment limited to 30. WRIT
Fall EDUC1850 S01 15078 M 3:00-5:30(15) (J. Li)

EDUC 1860. Social Context of Learning and Development.
Focuses on the social environment that contributes to the development of children's minds, language, self-understanding, relations with others, affect, and attitudes toward learning. Examines the period from birth through young adulthood. Topics include children's social interactions, parental expectations and socialization practices, and the influences of family, peers, school, and media. Prerequisites: EDUC 0800, EDUC 1270, EDUC 1430, EDUC 1580, EDUC 1710, CLPS 0610 (COGS 0630), or equivalent. Enrollment limited to 30. WRIT
Spr EDUC1860 S01 24092 Th 4:00-6:30(17) (J. Li)

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EDUC 1990. Independent Reading and Research.
Supervised reading and/or research for education concentrators who are preparing an honors thesis. Written permission from the honors advisor required. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Supervised reading and/or research for education concentrators who are preparing an honors thesis. Written permission from the honors advisor required. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EDUC 2070A. Student Teaching: English.
S/NC.
Fall EDUC2070A S01 15098 Arranged (L. Snyder)
Spr EDUC2070A S01 24108 Arranged (L. Snyder)

EDUC 2070B. Student Teaching: History and Social Studies.
S/NC.
Fall EDUC2070B S01 15099 Arranged (C. Villarreal)
Spr EDUC2070B S01 24110 Arranged (C. Villarreal)

EDUC 2070C. Student Teaching: Science.
S/NC.
Fall EDUC2070C S01 15102 Arranged "To Be Arranged"
Spr EDUC2070C S01 24111 Arranged "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
EDUC 2080A. Analysis of Teaching: English.
No credit course.
Fall EDUC2080S S01 15104 W 4:30-7:00 (L. Snyder)
Spr EDUC2080AS S01 24112 W 4:30-7:00 (L. Snyder)

EDUC 2080B. Analysis of Teaching: History and Social Studies.
No credit course.
Fall EDUC2080H S01 15103 W 4:30-7:00 (C. Villarreal)
Spr EDUC2080HS S01 24109 W 4:30-7:00 (C. Villarreal)

EDUC 2080C. Analysis of Teaching: Science.
No credit course.
Fall EDUC2080S C S01 15100 W 4:50-7:00 "To Be Arranged"
Spr EDUC2080CS C S01 24113 W 4:30-7:00 "To Be Arranged"

EDUC 2120. Practicum and Seminar in Elementary Education.
Students participate in an elementary classroom for 2 1/2 days a week for 12 weeks, participating in all aspects of the school day. Students assume responsibility for individualized instruction, small groups and some daily routines. Examines topics in child development; race, class, and linguistic diversity; assessment; teaching and learning as well as topics arising from the experiences in classrooms. S/NC.
Fall EDUC2120 S01 15126 Th 4:00-7:00 (J. Gujarati)

Using a developmental approach, students are introduced to the major concepts and teaching methods used in elementary math and science classrooms. S/NC.
Fall EDUC2140 S01 15146 F 1:00-4:30 "To Be Arranged"
Spr EDUC2140 S01 24130 F 1:00-4:30 "To Be Arranged"

EDUC 2150. Language and Literacy in the Elementary School Classroom.
An introduction to Comprehensive Literacy instruction in reading and writing, including strategies for teaching interactive read alouds; shared reading and shared writing; phonics and word work; independent reading workshop; guided reading; writer's notebooks; writing workshop; and children's literature via an author study. S/NC.
Fall EDUC2150 S01 15147 M 4:00-6:30 (M. Nosal)
Spr EDUC2150 S01 24131 W 4:00-6:30 (M. Nosal)

EDUC 2270. Student Teaching.
Provides no fewer than 180 hours of student teaching and observation-equivalent to six semester hours of credit in institutions operating on a semester-hour basis and fulfills the supervised student teaching requirements for elementary school teaching certification in Rhode Island and in ICC member states. S/NC.
Spr EDUC2270 S01 24114 Arranged (J. Gujarati)

EDUC 2280. Seminar: Principles of Learning and Teaching.
A critical analysis of the activity of teaching, restricted to and required of students taking EDUC 2270. The course requires curriculum and lesson planning, reflective analyses of student learning and classroom teaching, and places learning and teaching in context with attention to issues of diversity of schools and their student bodies. S/NC.
Spr EDUC2280 S01 24126 Th 4:00-7:00 (J. Gujarati)

EDUC 2320. Quantitative Research Methods and Data Analysis.
The goal of this course is to provide students in the Urban Education Policy course with a foundation and understanding of basic statistical analyses so that they will be able to design and carry out their own research and will be able to use data to inform education policy and practice.
Fall EDUC2320 S01 15076 W 4:00-6:30 (M. Kraft)

This course is a requirement for students of the MA in Urban Education Policy program. It deals with the political science and public policy central question of: How can public institutions be redesigned to improve accountability? Particular attention will be given to the governance and politics in urban public school systems.
Spr EDUC2330 S01 24097 W 4:00-6:30 (K. Wong)

EDUC 2350. Economics of Education II.
Introduces students to the main economic theories and related applied work that inform education policy analysis. In so doing, the course combines economic theory, econometric studies, and education and institutional literature in an examination of current issues in U.S. education, particularly those issues that are most relevant to urban education. The course begins with examinations of key concepts and theories from microeconomics, labor economics, and public economics that are most relevant for studying questions in education. After laying this theoretical foundation the course then examines how these theories can illuminate and aid policy analysis around key topics in U.S. education. Open to graduate students only.
Fall EDUC2350 S01 15081 M 4:00-6:30 (J. Tyler)

EDUC 2360. Policy Analysis and Program Evaluation for Education.
Informed education policymaking requires reliable information about the causal effects of government programs and other factors shaping educational outcomes. This course offers an overview of education policy analysis with an emphasis on econometric strategies for measuring program impacts. It aims to make students critical consumers of policy evaluations and to equip them with tools to conduct their own research. Topics covered include the political context for policy research, social experiments, alternative strategies for making causal inferences, and cost-benefit analysis. Prerequisites: EDUC 1110, POLS 1600, SOC 1100, or written permission of the instructor.
Spr EDUC2360 S01 24094 Th 4:00-6:30 (J. Papay)

EDUC 2450. Exchange Scholar Program.

EDUC 2990. Thesis Preparation.
No description available.
Fall EDUC2990 S01 14969 Arranged "To Be Arranged"
Spr EDUC2990 S01 23997 Arranged "To Be Arranged"

EDUC XLIST. Courses of Interest to Concentrators in Education.

Egyptology and Assyriology

From the Hanging Gardens of Babylon to the Tower of Babel to Babylon 5, the city of Babylon in ancient Iraq holds an important place in contemporary culture. But how much of what is commonly known of Babylon is true? In this course we will explore the ancient city of Babylon through its texts and archaeological remains and investigate the ways Babylon has been viewed over the past two thousand years. Enrollment limited to 20 first year students. Instructor permission required. FYS WRIT
Fall ASSYR0300 S01 15156 TTh 10:30-11:50(13) (J. Steele)

ASSYR 1000. Introduction to Akkadian.
An intensive introduction to the cuneiform writing system and the basic grammar and vocabulary of Akkadian, a language first attested over four thousand years ago in Mesopotamia (modern Iraq). The earliest known member of the Semitic family of languages (like Arabic and Hebrew), Akkadian was in use for over two thousand years across a wide expanse of the ancient Near East. Students will learn the classical Old Babylonian dialect of Akkadian (ca. 1800 BCE) and read Mesopotamian texts in the original, including selections from the Laws of Hammurabi, as well as excerpts from myths, hymns, prayers, historical documents, and letters.
Fall ASSYR1000 S01 15157 MWF 11:00-11:50(16) (M. Rutz)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ASYR 1010. Intermediate Akkadian.
This course is the second semester of an intensive, yearlong introduction to the Akkadian (Babylonian/Assyrian) language. Students will deepen their knowledge of the cuneiform writing system and continue to develop their grasp of Akkadian grammar. Readings from Mesopotamian texts in the original language and script will include, among others, selections from the Laws of Hammurapi, Assyrian historical texts (such as the accounts of Sennacherib’s siege of Jerusalem), and the story of the Flood from the Standard Babylonian Epic of Gilgamesh. Prerequisite: Introduction to Akkadian (ASYR 0200 or ASYR 1000) or permission of the instructor.
Spr ASYR1010 S01 24151 MWF 11:00-11:50(04) 'To Be Arranged'

ASYR 1100. Imagining the Gods: Myths and Myth-making in Ancient Mesopotamia.
Creation, the Flood, the Tower of Babel—well-known myths such as these have their origins in ancient Mesopotamia, the land between the Tigris and Euphrates Rivers. Using both ancient texts in translation and archaeology, this course will explore categories of Mesopotamian culture labeled "myth" and "religion" (roughly 3300-300 BCE), critically examining the ancient evidence as well as various modern interpretations. Topics will include myths of creation and the flood, prophecy and divination, death and the afterlife, ritual, kingship, combat myths and apocalypses, the nature and expression of ancient religious experience, and representations of the divine. There are no prerequisites. WRIT DPLL
Spr ASYR1100 S01 24152 TTh 2:30-3:50(11) (J. Steele)

ASYR 1600. Astronomy Before the Telescope.
This course provides an introduction to the history of astronomy from ancient times down to the invention of the telescope, focusing on the development of astronomy in Babylonia, Greece, China, the medieval Islamic world, and Europe. The course will cover topics such as the invention of the zodiac, cosmological models, early astronomical instruments, and the development of astronomical theories. We will also explore the reasons people practiced astronomy in the past. No prior knowledge of astronomy is necessary for this course. DPLL
Spr ASYR1600 S01 24154 TTh 10:30-11:50(09) (J. Steele)

ASYR 2400. Akkadian Literary and Religious Texts.
Readings in Akkadian literary and religious texts in the original language and script. Possible genres include myths, proverbs, and literary miscellanea as well as prayers, hymns, incantations, rituals, prophecies, and divinatory texts. This course is intended primarily for graduate students and may be repeated for credit. A reading knowledge of Akkadian cuneiform is required. A reading knowledge of both German and French is recommended but not required.
Fall ASYR2400 S01 15155 M 3:00-5:30(15) (M. Rutz)

ASYR 2710. Babylonian Astronomy.
An advanced seminar on Babylonian astronomy, taking both a technical and a cultural perspective on the history of this ancient science.
Fall ASYR2710 S01 15164 Arranged (J. Steele)

ASYR 2900. Introduction to Hittite Language and Literature.
This course is an introduction to Hittite language, literature, and culture. Hittite, the earliest attested Indo-European language (thus related to Greek, Latin, and Sanskrit) was used in Anatolia during the second millennium BCE. It survives in tens of thousands of tablets written in cuneiform script. Students will learn the basic grammar of the language and read in the original or in translation specimens from the fascinating textual legacy of the Hitites, which includes myths, prayers, laws, diplomatic texts as well as formal and informal letters. They will also become familiar with the cultural environment in which those texts were composed.
Fall ASYR2900 S01 24153 TTh 1:00-2:20(10) (F. Rojas Silva)

ASYR 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ASYR 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall ASYR2990 S01 14948 Arranged 'To Be Arranged'
Spr ASYR2990 S01 23981 Arranged 'To Be Arranged'

ASYR XLIST. Courses of Interest to Concentrators in Egyptology and Assyriology.

Egyptology

EGYT 1310. Introduction to Classical Hieroglyphic Egyptian Writing and Language (Middle Egyptian I).
Much of this two-semester sequence is spent learning the signs, vocabulary, and grammar of one of the oldest languages known. By the end of this introductory year, students read authentic texts of biographical, historical, and literary significance. The cornerstone course in the Department of Egyptology-essential for any serious work in this field and particularly recommended for students in archaeology, history, classics, and religious studies. No prerequisites.
Fall EGYT1310 S01 15165 TTh 9:00-10:20(08) (J. Allen)

EGYT 1320. Introduction to Classical Hieroglyphic Egyptian Writing and Language (Middle Egyptian II).
Continuation of a two-semester sequence spent learning the signs, vocabulary, and grammar of one of the oldest languages known. By the end of this introductory year, students read authentic texts of biographical, historical, and literary significance. The cornerstone course in the Department of Egyptology - essential for any serious work in this field and particularly recommended for students in archaeology, history, classics, and religious studies. Prerequisite: EGYT 1310.
Spr EGYT1320 S01 24155 TTh 9:00-10:20(01) (J. Allen)

EGYT 1330. Selections from Middle Egyptian Hieroglyphic Texts.
Readings from the various genres of classical Egyptian literature, including stories and other literary texts, historical inscriptions, and religious compositions. Students will be expected to translate and discuss assigned texts. Prerequisite: EGYT 1310, 1320.
Fall EGYT1330 S01 15166 MW 8:30-9:50(01) (J. Allen)

EGYT 1430. History of Egypt I.
A survey of the history and society of ancient Egypt from prehistoric times to the end of the Eighteenth Dynasty (ca. 5000-1300 BC). Readings include translations from the original documents that serve as primary sources for the reconstruction of ancient Egyptian history. WRIT
Fall EGYT1430 S01 15168 MW 12:00-12:50(06) (L. Bestock)

EGYT 1440. History of Egypt II.
A survey of the history and society of ancient Egypt from the Ramesside Period to the Roman conquest (ca. 1300-30 BC). Readings include translations from the original documents that serve as primary sources for the reconstruction of ancient Egyptian history.
Spr EGYT1440 S01 24157 MW 1:00-1:50(06) 'To Be Arranged'

EGYT 1465. Daily Life in Ancient Egypt.
Ancient Egypt is remembered for its grand temples and enduring tombs. Histories too often favor these examples of grandeur, forgetting the daily lives of non-royal ancient Egyptians. This class will investigate the daily lives of these underrepresented ancient Egyptians - craftsmen, servants, women, children - and address concerns such as illness, status, economy, magic and death. Additionally, we will look at the individual and discuss sexuality, love, style and fashion, religious practice and the family. Class format will include lectures and discussions, presentations, and tours through virtual temples which will enable us to reconstruct the daily lives of Ancient Egyptians.
Spr EGYT1465 S01 24160 MW 2:00-2:50(07) 'To Be Arranged'

EGYT 1910. Senior Seminar.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EGYT 1920. Senior Seminar.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
EGYT 2210. Introduction to Coptic.
Coptic, the last stage of the ancient Egyptian language, was written with essentially Greek alphabetic characters. An introduction to Sahidic, which is perhaps the best represented of the Coptic dialects. Sahidic grammar is explained, and some texts, mainly of a biblical and patristic nature, are read. Open to undergraduates with the consent of the instructor. No prerequisites, but a knowledge of Middle Egyptian or Greek would be helpful.
Spr EGYT2210 S01 24159 Arranged (L. Depuydt)

EGYT 2300. Readings in Ancient Egyptian.
Advanced readings in ancient Egyptian texts in the original script and language. Readings will be selected from a particular genre, historical period, or site. This course is intended primarily for graduate students and may be repeated for credit. A reading knowledge of ancient Egyptian is required. A reading knowledge of both German and French is strongly recommended but not required.
Spr EGYT2300 S01 24156 Arranged (J. Allen)

EGYT 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall EGYT2970 S01 14970 Arranged "To Be Arranged"
Spr EGYT2970 S01 23998 Arranged "To Be Arranged"

EGYT 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

EGYT 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a thesis.
Fall EGYT2990 S01 14971 Arranged "To Be Arranged"
Spr EGYT2990 S01 23999 Arranged "To Be Arranged"

EGYT XLIST. Courses of Interest to Concentrators in Egyptology and Assyriology.

Engineering

This course will address the impact that technology has on society, the central role of technology on many political issues, and the need for all educated individuals to understand basic technology and reach an informed opinion on a particular topic of national or international interest. The course will begin with a brief history of technology.
Spr ENGN0020 S01 25146 MWF 11:00-11:50(04) (J. Harry)

ENGN 0030. Introduction to Engineering.
An introduction to various engineering disciplines, thought processes, and issues. Topics include computing in engineering, engineering design, optimization, and estimation. Case studies in engineering are used to illustrate engineering fields and scientific principles, including in-depth studies of statics. Laboratories and design projects are included. Prerequisite: one of the following: APMA 0330, 0340, 0350, 0360, MATH 0100, 0170, 0180, 0190, 0200, 0350, 0520, 0540, which may be taken concurrently.
Fall ENGN0030 M01 15397 MWF 1:00-1:50 (K. Haberstroh)
Fall ENGN0030 S01 15392 T 9:00-10:20 (K. Kim)
Fall ENGN0030 S02 15393 T 2:30-3:50 (K. Kim)
Fall ENGN0030 S03 15394 Th 9:00-10:20 (K. Kim)
Fall ENGN0030 S04 15395 Th 2:30-3:50 (K. Haberstroh)

ENGN 0031. Honors Introduction to Engineering.
Introduction to various engineering disciplines, thought processes, and issues. Computing in engineering, engineering design, optimization, and estimation. Case studies illustrate engineering fields and scientific principles, including in-depth studies of statics. Laboratories and design projects are included. The section of the Honors course will focus on scientific programming using MATLAB with applications in statics. Students pursuing concentrations in Mechanical, Electrical or Materials Engineering who complete the Honors course successfully may substitute an approved Engineering or Computer Science course in place of CSCI 0040. Prerequisite: one of the following: MATH 0100, 0170, 0180, 0190, 0200, 0350, 0520, 0540, which may be taken concurrently.
Fall ENGN0031 M01 16867 MWF 1:00-1:50 (K. Haberstroh)
Fall ENGN0031 S01 16664 T 10:30-11:50 (S. Reda)
Fall ENGN0031 S02 16666 Th 10:30-11:50 (S. Reda)

ENGN 0040. Dynamics and Vibrations.
Study of the kinematics and dynamics of particles and rigid bodies. Principles of motion of mechanical systems. Concepts of inertia, work, kinetic energy, linear momentum, angular momentum, and impact. Applications to engineering systems, satellite orbits, harmonic vibrations of one and two degree of freedom systems. Lectures, recitations, and laboratory. Prerequisite: ENGN 0030. Corequisite: MATH 0200 or 0180.
Spr ENGN0040 S01 25151 TTh 9:00-10:20(01) (A. Bower)

ENGN 0090. Management of Industrial and Nonprofit Organizations.
Exposes students to the concepts and techniques of management. Topics include marketing; strategy, finance, operations, organizational structure, and human relations. Guest lecturers describe aspects of actual organizations. Lectures and discussions.
Fall ENGN0090 S01 15399 TTh 2:30-3:50(03) (B. Hazeltine)
Fall ENGN0090 S02 15400 TTh 1:00-2:20(10) (B. Hazeltine)

ENGN 0120A. Crossing the Consumer Chasm by Design.
Technologies have shaped human life since tools were sticks and flints to today's hydrocarbon powered, silicon managed era. Some spread throughout society; bread, cell phones, airlines, but most never do; personal jet packs, Apple Newton, freeze dried ice cream. Space Tourism, the Segway, electric cars: Can we predict which ones will cross the chasm to broad application? Can we help them to by combining design, engineering, marketing, communications, education, art, and business strategies?
Student teams identify potential new products, conceptualize, package, and define their business model. By plotting their course across the chasm, we confront the cross-disciplinary barriers to realizing benefits from technology. Enrollment limited to 18 first year students. Instructor permission required.
FYS WRIT Spr ENGN0120A S01 25164 MWF 11:00-11:50(04) (R. Fleeter)

ENGN 0130. The Engineer's Burden: Why Changing the World is Difficult.
We will examine the assertion that most of the changes that have improved people's lives are essentially technological and then we will look at the difficulties in creating sustainable and beneficial change. Topics of interest include unintended consequences, failure to consider local culture, and engineering ethics. Many, but not all, of the examples will have a third world context. The engineering focus will be on infrastructure—housing, water and sanitation, transportation, and also mobile devices as used in health care and banking.
Fall ENGN0130 S01 15401 MWF 11:00-11:50(16) (B. Hazeltine)

ENGN 0260. Mechanical Technology.
A basic machine shop course that, with the help of an instructor, teaches students how to fabricate a few simple objects using hand tools and some basic machines. This course is designed to introduce the student to the machining process and environment. Audit only.
Fall ENGN0260 S01 15177 TTh 10:30-11:50(13) (C. Bull)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Mechanical behavior of materials and analysis of stress and deformation in engineering structures and continuous media. Topics include concepts of stress and strain; the elastic, plastic, and time-dependent response of materials; principles of structural analysis and application to simple bar structures, beam theory, instability and buckling, torsion of shafts; general three-dimensional states of stress; Mohr's circle; stress concentrations. Lectures, recitations, and laboratory. Prerequisite: ENGN 0030. Fall ENGN0310 S01 15365 MWF 9:00-10:00(01) (P. Guduru)

ENGN 0410. Materials Science.
Relationship between the structure of matter and its engineering properties. Topics: primary and secondary bonding; crystal structure; atomic transport in solids; defects in crystals; mechanical behavior of materials; phase diagrams and their utilization; heat treatment of metals and alloys; electrical and optical properties of materials; strengthening mechanisms in solids and relationships between microstructure and properties. Lectures, recitations, and laboratory. Fall ENGN0410 S01 15362 TTh 9:00-10:20(08) (S. Kumar)

ENGN 0510. Electricity and Magnetism.
Fundamental laws of electricity and magnetism and their role in engineering applications. Concepts of charge, current, potential, electric field, magnetic field. Resistance, capacitance, and inductance. Electric and magnetic properties of materials. Electromagnetic wave propagation. Lectures, recitation, and laboratory. Prerequisites: ENGN 0030 or PHYS 0070; ENGN 0040 or PHYS 0160 (previously 0080); MATH 0180 or 0200; and APMA 0330 or 0350 (may be taken concurrently). Fall ENGN0510 S01 15411 MWF 10:00-10:50(14) (J. Beresford)

ENGN 0520. Electrical Circuits and Signals.
An introduction to electrical circuits and signals. Emphasizes the analysis and design of systems described by ordinary linear differential equations. The frequency domain is introduced, including the effects of sampling and windowing in computer simulations. Other topics include transient analysis, Fourier series, and Laplace transform. Laboratories apply concepts to real problems in audio and controls. Lectures, recitation, and laboratory. Prerequisite: MATH 0180 or MATH 0200, courses may be taken concurrent to ENGN 0520. Spr ENGN0520 S01 25188 MWF 10:00-10:50(03) (J. Rosenberg)

Properties of fluids, dimensional analysis. Fluid statics, forces on submerged surfaces, kinematics. Conservation equations. Frictionless incompressible flows, Euler's equations, Bernoulli's equation: thrust, lift, and drag. Vorticity and circulation. Navier-Stokes equation, applications. Laminar and turbulent boundary layers, flow separation. Steady onedimensional compressible flow. Sound, velocity, flow with area change, normal shocks. Lectures, laboratory. Prerequisites: ENGN 0040, APMA 0340 or equivalent. Fall ENGN0810 S01 15416 MWF 1:00-1:50(06) (J. Franck)

ENGN 0900. Decision Making.
Ways of making effective decisions in managerial situations, especially situations with a significant technological component; decision analysis; time value of money; competitive situations; forecasting; planning and scheduling; manufacturing strategy; corporate culture. Lectures and discussions. Prerequisite: ENGN 0090 or MATH 0100. Spr ENGN0900 S01 25202 TTh 1:00-2:20(10) (B. Hazeltine)

ENGN 0930C. DesignStudio.
DESIGNSTUDIO is a course open to students interested in learning through making. Working in a studio environment, we will iteratively design, build, and test projects, as we imaginatively frame design problems, and develop novel strategies for addressing those problems. We will explore design thinking, creative collaboration, exploratory play, ideation, iteration, woodworking, prototyping, CNC milling and laser cutting – in addition to other strategies that enhance our creative processes - as we establish a technical and conceptual foundation for the design and fabrication of objects and experiences. Enrollment limited to 16. Instructor permission required. Spr ENGN0930C S01 25206 MW 9:00-12:00 (I. Gonsber)

ENGN 1000. Projects in Engineering Design.
Projects in design for concentrators in chemical, electrical, materials, and mechanical engineering. Students generally work in teams on projects that are defined through discussions with the instructor. An assembled product or detailed design description is the goal of the semester's effort. Prerequisite: completion of engineering core program. Written permission required. Fall ENGN1000 S01 15424 MW 3:00-5:30 (J. Fontaine)
Spr ENGN1000 S01 25211 MW 3:00-5:00 (J. Fontaine)

ENGN 1130. Phase and Chemical Equilibria.
Application of the first and second laws of thermodynamics and conservation of mass to the analysis of chemical and environmental processes, phase and chemical equilibria and partitioning of species in multiphase, nonreactive and reactive systems. Thermodynamic properties of fluid mixtures-correlation and estimation. Applications and examples drawn from chemical processing and environmental problems. Prerequisite: ENGN 0720. Fall ENGN1130 S01 15485 TTh 2:30-3:50(03) (C. Goldsmith)

ENGN 1220. Neuroengineering.
Course Goals: To develop an advanced understanding of how signals are generated and propagated in neurons and neuronal circuits, and how this knowledge can be harnessed to design devices to assist people with neurologic disease or injury. Fundamental topics in neuronal and neural signal generation, recording methods, and stimulation methods. Clinical/Translational topics include multiple clinically available and emerging neurotechnologies. Prerequisites: NEUR 0010 and ENGN 0510; or instructor permission, which may be provided after discussion with course faculty. Spr ENGN1220 S01 25227 TTh 1:00-2:20(10) (L. Hochberg)

ENGN 1230. Instrumentation Design.
Sensors for pressure, temperature, blood flow, muscle and neural activity. Amplifiers, filters, and A/D-D/A converters. The use of computers in monitoring and controlling physiological processes. Feedback controllers for temperature, flow rate, and experimental stimuli. Intended as a design course primarily for biomedical engineers. Lab times to be arranged. WRIT Fall ENGN1230 S01 15430 MWF 10:00-10:50(14) (D. Borton)

ENGN 1300. Structural Analysis.
A unified study of truss, beam, frame, plate, and shell structures. Emphasis on principles of virtual work and numerical methods of elastic structural analysis by matrix methods. Includes calculation of deflections and reactions in beam structures, beam vibrations, and column buckling. Theorems of plastic limit analysis. Plate bending. Membrane stresses and local bending effects in axially symmetric shells. Prerequisite: ENGN 0310. Spr ENGN1300 S01 25228 MWF 9:00-9:50(02) (H. Gao)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGN 1340. Water Supply and Wastewater Treatment.
The hydrological cycle, surface water hydrology, ground water hydrology. Emphasis on the formulation of mathematical models of various flow problems and their solution by analytical or numerical means. Typical problems: open channel and river flows; flood routing; ground water flow in aquifers and into wells. Topics in wastewater treatment plant design: mixing, residence time, aeration, and, bacteriological and chemical treatment processes. Prerequisite: CHEM 0330 and MATH 0170 or MATH 0190. Not open to first year students. Enrollment limited to 40.
Spr ENGN1340 S01 25229 W 3:00-5:30(14)  (I. Kulaads)

A unified study of the dynamics of particles, rigid bodies, and deformable continua. Generalized coordinates and Lagrange's equations; variational principles; stability of equilibrium; vibrations of discrete systems and of elastic continua, and wave propagation. Prerequisites: ENGN 0040, APMA 0340, or equivalent.
Spr ENGN1370 S01 25230 TTh 9:00-10:20(01)  (H. Kesari)

ENGN 1380. Design of Civil Engineering Structures.
This course provides an introduction to the design of steel and reinforced concrete structures using ultimate strength methods. Lectures will cover key concepts of design theory, building codes, and standards using examples from real structures. Students will apply concepts through computer labs, homework problems, and a design project. Lectures plus lab. Prerequisite: ENGN 1300.
Fall ENGN1380 S01 15431 TTh 6:40-8:00PM(05)  (D. Odeh)

ENGN 1410. Physical Chemistry of Solids.
Application of physical chemistry and solid state chemistry to the structure and properties of engineering solids as used in solid state devices, ceramics, and metallurgy. Equilibrium and free energy of heterogeneous systems, thermodynamics of solutions, chemical kinetics, diffusion, catalysis and corrosion, solid state transformations. Case studies taken from industrial practice. Prerequisites: ENGN 0410, 0720.
Fall ENGN1410 S01 15433 Th 4:00-6:30(04)  (A. Van De Walla)

This course introduces the basic principles and formulations that describe kinetic processes in materials science and engineering. These are divided into the following principle types of mechanisms: solid state diffusion, reactions at surfaces and interfaces, and phase transformations. The final section of the course applies these principles to several relevant materials processing systems. Prerequisites: ENGN 0410, 0720, 1410 or equivalent.
Spr ENGN1420 S01 25231 TTh 9:00-10:20(01)  (B. Sheldon)

Begins with basic concepts of mechanical properties common to all materials, with some emphasis on dislocation theory. Particular attention is given to the relationship between mechanical properties and microstructures. The different types of mechanical tests that are used in each of these fields are analyzed. Lectures plus laboratories. Prerequisite: ENGN 0410.
Fall ENGN1440 S01 15434 TTh 1:00-2:20(10)  (S. Kumar)

A study of the structure and properties of nonmetallic materials such as glasses, polymers, elastomers, and ceramics. The crystal structure of ceramics and polymers, and the noncrystalline networks and chains of glasses, polymers, and elastomers and the generation of microstructures and macrostructures are considered. The mechanical, chemical, electrical, magnetic, and optical properties and their dependence on structure are developed. Prerequisite: ENGN 0410.
Fall ENGN1470 S01 15435 TTh 4:30-5:50(0)  (N. Padture)

ENGN 1490. Biomaterials.
Biomaterials science, the study of the application of materials to problems in biology and medicine, is characterized by medical needs, basic research, and advanced technological development. Topics covered in this course include materials used in bone and joint replacement, the cardiovascular system, artificial organs, skin and nerve regeneration, implantable electrodes and electronic devices, drug delivery, and ophthalmology.
Fall ENGN1490 S01 15437 MWF 2:00-2:50(07)  (G. Palmore)

ENGN 1510. Nanoengineering and Nanomedicine.
Studying in this course will develop a fundamental understanding of nanotechnology and its applications in medicine. We will discuss nanomaterials synthesis, fabrication, and characterization. Medical applications of these materials will include drug delivery, imaging and diagnostics, and tissue engineering approaches. Nanotoxicology will also be discussed. Research methods in nanotechnology and nanomedicine will be emphasized (i.e. critical analysis of scientific literature, effective oral and written communication). Students will also have the opportunity to gain an introduction to several nanotechnology research tools available on campus. This course is for engineering and science graduate students and advanced upper-level engineering undergraduates.
Fall ENGN1510 S01 15438 Th 1:00-2:20(10)  (A. Shukla)

ENGN 1520. Cardiovascular Engineering.
In this course, students will learn quantitative physiological function of the heart and vascular system, including cardiac biomechanics and vascular flow dynamics, through lectures and discussion of current scientific literature. A systems approach will integrate molecular biophysics, cell biology, tissue architecture, and organ-level function into a quantitative understanding of health and disease. Discussion topics will include cardiovascular devices, pre-clinical regenerative therapies, stem cell ethics, and clinical trials. WRIT
Fall ENGN1520 S01 15441 MWF 2:00-2:50(07)  (K. Coulombo)

A first course on electromagnetic waves and photonics. Topics to be covered include basic wave phenomena with an emphasis on geometric optics, the interaction of light with matter, scattering, and interference and diffraction effects. Also covered will be a selected number of more advanced topics including laser physics, nonlinear optics, transmission lines, and antennas.
Spr ENGN1560 S01 25234 MWF 12:00-12:50(05)  (D. Mittelman)

ENGN 1570. Linear System Analysis.
Analysis of discrete and continuous electrical signals and systems in both time and frequency domains. Modulation, sampling, spectral analysis, analog and digital filtering. Fourier, Laplace and z-transforms, the state-space approach, stability of linear systems. Prerequisite: ENGN 0520.
Fall ENGN1570 S01 15442 MWF 1:00-1:50(06)  (B. Kimura)

ENGN 1590. Introduction to Semiconductors and Semiconductor Electronics.
An introduction to the physics of fundamental electronic processes that underlie the operation of semiconductor devices on a microscopic scale. Basic electronic properties of semiconductors and effects at interfaces heterogeneous media, such as pn junctions and hetero-structure barriers and quantum wells. These junctions, barriers and wells are used as building blocks for devices, focusing on bipolar and field-effect transistors. Modern trends in micro- and opto-electronic devices are discussed. A brief fabrication lab will introduce pn junction fabrication technology. Prerequisites: ENGN 0410 and 0510.
Fall ENGN1590 S01 15443 MWF 10:00-10:50(14)  (A. Zaslavsky)

ENGN 1630. Digital Electronics Systems Design.
Fundamentals of digital logic design including: Boolean algebra, gates, truth tables, logic families, flip-flops, finite state machines, memory, and timing. More advanced topics include A-D conversion, binary arithmetic, CPU organization, programmable logic (CPLDs and FPGAs), and VHDL. Extensive laboratory requirement. Not open to first year students; permission required for sophomores.
Fall ENGN1630 S01 15444 WF 3:00-4:20  (W. Patterson)
This course introduces the main concepts and techniques for designing computing systems. Topics covered include assembly language, instruction set design, pipelining, superscalar and VLIW processor design, memory subsystem design, and I/O interfacing. Laboratory topics include programmable logic devices, hardware definition languages, and implementation of a bootable version of the pipelined MIPS processor. Laboratory emphasizes design optimizations with respect to speed and design area. Prerequisite: ENGN 1630 or passing of a quiz on basic digital logic concepts, or instructor permission.
Spr ENGN1640 S01 25237 MWF 10:00-10:50(03) (S. Reda)

ENGN 1650. Embedded Microprocessor Design.
This is a combined lecture and design project course offering experience in the open-ended design of an electronic product or system employing an embedded microprocessor by small-group design teams. Activity includes product specification, circuit design, programming, printed circuit layout, construction, packaging, and economic assessment. Teams are expected to produce functional products. Lecture topics will be adjusted to reflect the chosen design problems. Emphasis is placed on the criteria for choosing processors and on the interfaces and programming requirements of the system. Primarily for senior concentrators. Experience with C programming is helpful but not required. Prerequisite ENGN 1630 or permission of the instructor.
Fall ENGN1650 S01 15445 TTh 10:30-11:50(13) (W. Patterson)

ENGN 1700. Jet Engines and Aerospace Propulsion.
Dynamics and thermodynamics of compressible internal flows with applications to jet engines for both power and propulsion, rocket engines and other propulsion systems. Thermodynamic analyses of engine cycles with and without afterburners. Fluid dynamics of high Mach number systems. Structural and Materials considerations for engine design. Team projects for analysis and design of novel jet engine concepts. Prerequisite: ENGN 0720 and 0810.
Fall ENGN1700 S01 15446 MWF 11:00-11:50(16) (J. Liu)

Steady 1D and 2D heat conduction with heat generation. Transient heat conduction. Forced convection, heat convection during internal and external flows. Natural convection. Heat Exchangers, Thermal radiation, Kirchhoff's law, the perfect emitter, radiation intensity and surface emissive power, real surface radiation; view factors for black and gray surfaces. Diffusion mass transfer. Lectures and labs. Prerequisite: ENGN 0810.
Spr ENGN1710 S01 25240 TTh 10:30-11:50(09) (I. Kulaods)

Fall ENGN1750 S01 15447 TTh 2:30-3:50(03) (C. Franck)

ENGN 1760. Design of Space Systems.
Working in design groups, students conceive a space mission and design all of the elements necessary for its execution including launch and orbit / trajectory, space and ground systems, including analysis of structure, thermal, radio link, power and mass budgets, attitude control and dynamics. Each group builds a hardware project to demonstrate a core element of their mission design. Prerequisites: Engineering core curriculum or equivalent
Spr ENGN1760 S01 25243 MWF 1:00-1:50(06) (R. Fleeter)

Numerical analysis techniques related to solving systems of linear algebraic equations, matrix eigenvalue problems, nonlinear equations, polynomial approximation and interpolation, numerical integration and differentiation, ordinary and partial differential equations. Programming in Matlab. Pre-req: ENGN0040, CSCI 0040 or equivalent programming ability. APMA 0330, APMA 0340 or equivalent.
Fall ENGN1840 S01 16662 TTh 9:00-10:20(08) (J. Franck)

Aims to give mechanical engineering students a deeper and more thorough grounding in principles and basic applications. Topics include review of the conservation principles; inviscid flow; viscous flow, including aerodynamics lubrication theory; laminar boundary layers; wave motions and wave drag. Lectures, assignments, computational projects, and laboratory. Prerequisites: ENGN 0720 and 0810.
Spr ENGN1860 S01 25244 MWF 11:00-11:50(04) (J. Franck)

ENGN 1930B. Biomedical Optics.
Biomedical optics is a rapidly growing field with applications in medicine, biology, neuroscience, genetics, and environmental science. The course covers both theoretical background and technical approaches underlying biomedical imaging technologies. The theoretical background focuses on how photons transport in biological tissues, including the radiative transport equation and photon diffusion theory. The course offers not only mathematical fundamentals of the theories but also opportunities of learning the theories through numerical simulations on MATLAB. The technical approaches include those for various imaging technologies ranging from conventional microscopy to optical coherence tomography. Prerequisites: Undergraduate level ENGN 0510 Minimum Grade of S
Spr ENGN1930E S01 25245 MWF 12:00-12:50(05) (J. Lee)

ENGN 1930L. Biomedical Engineering Design, Research and Modeling.
This course is the culmination “Capstone” of the biomedical engineering educational experience. The primary objective of this course is to recall and enhance design principles introduced through the engineering core curriculum and to apply this systematic set of engineering design skills to biomedical engineering projects. Students will form teams with their peers and a clinical advisor, identify and define a design project to meet a clinical need, and engage in the design process through the course of the semester. For seniors only.
Fall ENGN1930L S01 15449 MWF 8:30-9:50(01) (A. Tripathi)

ENGN 1930M. Industrial Design.
Brown engineering and RISD industrial design faculty lead product development teams through a design cycle. Engineers explore industrial design, designers gain some insight into engineering, and both groups can apply their skills to challenging problems. Frequent presentations, field trips, critiques, and labs. Preference given to seniors. Prerequisites: completion of engineering core. Enrollment limited to 15 students.
Fall ENGN1930M S01 15450 Spr Arranged (C. Bull)

ENGN 1930T. Aircraft Design.
The process of aircraft conceptual design as practiced in industry; requirements definition to initial sizing, configuration layout, analysis, sizing, optimization, and trade-off studies. Concepts and calculation methods for aerodynamics, stability and control, propulsion, structures, weights, performance, and cost; coverage of conventional and unconventional design methods drawing from knowledge gained in engineering science courses, synthesized towards novel imaginative aircraft designs guided by participants’ interests. Prerequisite: the level of senior in engineering studies.
Fall ENGN1930T S01 15451 MWF 12:00-12:50(12) (J. Liu)

ENGN 1931A. Photovoltaics Engineering.
This seminar course will provide an overview of the operation, design, characterization, and manufacturing of photovoltaic solar cells and panels. The course will span a range from the fundamental physics of solar cell operation to highly applied, industrially relevant engineering topics. Recommended prerequisites: Good knowledge of basic physics and electromagnetism concepts; proficiency in ENGN 0510 or PHYS 0470; This course is designed for undergraduate and graduate students in Physics, Chemistry and Engineering interested in the field of alternative energy with a focus in photovoltaics. Enrollment limited to 20.
Spr ENGN1931A S01 25381 W 3:00-5:30(14) To Be Arranged
ENGN 1931D. Design of Mechanical Assemblies.
An introduction to the design and development of mechanical assemblies suitable for production over a range of volumes, from prototypes to high volume manufacture. The course is intended to present an overview of basic machine components and manufacturing processes from the perspective of a design engineer in a contemporary industrial setting. The objective of which being to provide students the background necessary to create mechanical assemblies from blank page concepts through to production ready designs. Coursework will include both theoretical and experimental exercises as well as two group projects working on a mechanical assembly produced via high volume manufacture. Prerequisite: ENGN 0310, 1740. Enrollment limited to 20.
Fall ENGN1931D S01 15452 M 7:00-9:40PM (B. Burke)

ENGN 1931E. Writing Science.
This seminar focuses on communicating scientific and technical information to a lay audience in ways that engage and inform. The focus is on writing about new findings, scientific disputes and policy debates, along with producing profiles, feature articles, op-eds and blog posts. Students who complete this seminar will learn how to turn a collection of facts into a story, ways of explaining complex topics in simple terms, and how to differentiate between crucial technical details and clutter. Proficiency in English is assumed. Permission from the instructor is required. Preference will be given to seniors and graduate students. Enrollment limited to 15.
Fall ENGN1931ES01 15486 W 3:00-5:30(17) (C. Dean)

This course explores all energy resources, but focuses mostly on current “useful” energy sources and their potential future replacements. (e.g., coal, petroleum, natural gas, shale gas). Environmental aspects of fuel processing are considered (mining, drilling, fracking). Current conversion technologies for delivering heat and power, and the limits of power conversion, are discussed. Conversion devices (e.g., engines, turbines, boilers, gasifiers), and their environmental footprints are considered. New carbon footprint power technologies are presented. Calculations of “carbon footprint” are illustrated. Examples of emissions control technologies, including carbon capture and sequestration are offered. New technologies for energy conversion are discussed.
Fall ENGN1931PS01 15462 TTh 10:30-11:50(13) (I. Kulaots)

Independent Study in Engineering. Instructor permission required after submitting online proposal (http://brown.edu/academics/engineering/content/independent-study). Section numbers vary depending on concentration. Please check Banner for the correct section number and CRN to use when registering for this course.

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ENGN 2110. Business Engineering Fundamentals I.
The course examines core concepts in distinct areas through three modules: (1) intellectual property and business law, (2) technical marketing and (3) finance. All aspects of intellectual property will be treated, models on how to analyze markets will be discussed, culminating in a finance module which utilizes accounting fundamentals and models to perform financial analysis.
Fall ENGN2110 S01 15356 W 3:00-5:50 (E. Suuberg)

ENGN 2120. Business Engineering Fundamentals II.
The course examines core concepts in distinct areas through three modules: (1) organizations, leadership, and human capital, (2) implementing radical technology change, and (3) engineering ethics. Organization, leadership and human capital focuses on the attributes of effective leadership and the tactical operation of start-up companies, implementing radical technological change centers on disruptive technologies and their adaptation in the marketplace, and ethics treats the issues that arise in small start-up organizations with an emphasis on the interface of ethics and environmental, health and safety issues.
Spr ENGN2120 S01 25253 W 3:00-5:50 (E. Suuberg)

The primary objective of the course is to train students on tools, skills, and behaviors required for effective management of complex engineering, research, and business development projects. Although the course will be framed in the context of early-stage technology companies, the skills and principles will be applicable to businesses of any size and maturity. The course is organized around three actionable themes: project management, team management, and decision making.
Fall ENGN2125 S01 15361 Th 3:00-5:50 (J. Harry)

ENGN 2130. Innovation and Technology Management I.
Examines core concepts through four modules: (1) Industry Dynamics of Technological Innovation, (2) Formulating Technological Innovation Strategy, (3) Implementing Technological Innovation Strategy, and (4) Early Commercialization and Deployment. Industry Dynamics of Innovation will explore some of the drivers of technology innovation. Implementing Technological Innovation Strategy explores execution issues concerning the flow of technology and innovation from concept to physical product or service. Early Commercialization and Deployment will focus on more salient strategic and operational issues related to commercial readiness and roll-out of a technology-based product or service. Emphasis will be on technology oriented entrepreneurial enterprises, but exploration will also include larger more established organizations.
Fall ENGN2130 S01 15359 T 3:00-5:50 (R. Petteruti)

ENGN 2140. Innovation and Technology Management II.
Examines core concepts relevant to the management of operations in industrial enterprises with an emphasis on technology-oriented firms. Topics fall into three basic modules: (1) Capacity Planning, (2) Industrial Engineering, and (3) Materials & Resource Engineering. Capacity Planning will focus on capacity considerations in manufacturing and service organizations. Industrial Engineering will examine optimizing plant and process layouts. Materials & Resource Engineering will cover various aspects of planning and scheduling material, labor, and work center capacity. Inventory management techniques will also be introduced and examined as will concepts such as materials requirements planning and aggregate planning.
Spr ENGN2140 S01 25254 T 3:00-5:50 (R. Petteruti)

ENGN 2150. Technology Entrepreneurship and Commercialization I.
ENGN 2150 and the spring ENGN 2160 form a sequence that develops the skills for technology-based entrepreneurship. It teaches creation of viable high-growth-potential new ventures from emerging science and technology. It is from emerging S&T that a high percentage of new jobs are created, both by existing large companies and through the formation of new companies. You will examine S&T for new opportunities, create novel product or service concepts from these sources and determine whether these concepts truly represent new business opportunities. Pedagogy is a combination of lectures and “experiential learning”, with work undertaken as a two-semester project. Enrollment limited to 30 graduate students in the IMEE program.
Fall ENGN2150 S01 15360 M 3:00-5:50 (A. Kingon)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGN 2160. Technology Entrepreneurship and Commercialization II. ENGN 2160 and the prerequisite fall course 2150 form a course sequence that develops the knowledge of, and embeds the skills for, technology-based entrepreneurship. While 2150 has helped you to examine science and technology sources, and create a portfolio of opportunities from these, this course continues by developing selected opportunities into a compelling business case for the creation of a high growth potential new venture. Once again, learning is by a combination of lectures and "experiential learning," with work undertaken as a guided two-semester project. Prerequisite: ENGN 2150. Enrollment limited to 30 graduate students in the PRIME program.

Spr ENGN2160 S01 25256 M 3:00-5:50 (A. Kingon)

ENGN 2180. Globalization Immersion Experience and Entrepreneurship Laboratory. In this course, students will gain a better understanding of the political, social and cultural dynamics that influence entrepreneurial enterprises in different world regions. Meetings will be arranged with high technology companies and their venture arms, academic incubators, investment professionals, legal professionals, government officials, entrepreneurs, and other university faculty and students. The semester becomes a global entrepreneurship and innovation "laboratory" where students experience and take part in guest lectures from experts working in other countries. Classroom discussions, student presentations, papers and readings will be used to focus and further understand the globalization dynamic and its relationship to entrepreneurship. Prerequisite: ENGN 2110. Enrollment limited to graduate students in the PRIME program.

Spr ENGN2180 S01 25258 Th 3:00-5:50 (P. McHugh)


Spr ENGN2220 S01 25299 MWF 10:00-10:50(03) (C. Franck)


Spr ENGN2260 S01 25351 MWF 1:00-1:50(06) (P. Bower)


ENGN 2370B. Topics in Solid and Structural Mechanics. Devoted to one or more advanced topics in solid and structural mechanics not covered in the regular courses, such as: numerical methods in solid mechanics, theory of optimal design, shell structures and instability, or other topics of interest to the staff or visitors.

Fall ENGN2370BS01 16640 MWF 1:00-1:50(06) (K. Kim)


Spr ENGN2400 S01 25301 Thu 9:00-10:20(01) (D. Paine)


Fall ENGN2410 S01 15471 MW 8:30-9:50(01) (D. Paine)

ENGN 2420. Kinetic Processes and Mechanisms in Materials Science. Continuum and atomistic descriptions of diffusion in solids. Reactions involving surfaces and interfaces, including evaporation, adsorption, grain growth, and coarsening. Phase transformation kinetics, including nucleation, growth, solidification, spinodal decomposition, and martensitic transformations. Analysis of systems with multiple kinetic mechanisms (typical examples include oxidation, crystal growth, and sintering).

ENGN 2450. Electron Microscopy in Materials Science. Theory of electron optics and principles of transmission electron microscopy, including dynamical theory of electron diffraction and image contrast. Applications to materials analysis including defect, boundary, and phase analysis. Analytical electron microscopy including convergent beam diffraction, energy dispersive x-ray analysis, and energy loss spectroscopy. Intensive laboratory exercises. Fall ENGN2400 S01 25301 Thu 9:00-10:20(01) (D. Paine)

ENGN 2490A. Crystal Structures and Crystallography. The study and experimental analysis of solid structures from crystallography and crystal chemistry viewpoints. Electronic structure of the atom as related to core level chemical analysis techniques in material science. Atomic arrangements in solids, form crystallography, crystal symmetry and symmetry of finite objects, and experimental techniques in x-ray diffraction.

Fall ENGN2490A S01 15481 Thu 9:00-10:20(08) (E. Chason)

ENGN 2502. 3D Photography. An introduction to the basics of linear, shift invariant systems and signals and doing real processing of signal on a digital computer. Quantization and sampling issues are introduced. Discrete time and DFT properties, fast DFT algorithms, and spectral analysis are discussed. IIR and FIR digital filter design is a focus; stochastic and deterministic signals are introduced. MATLAB exercises are a significant part of the course.

Fall ENGN2502 S01 25304 MWF 4:00-5:30(17) (G. Taubin)

ENGN 2530. Digital Signal Processing. An introduction to the basics of linear, shift invariant systems and signals and doing real processing of signal on a digital computer. Quantization and sampling issues are introduced. Discrete time and DFT properties, fast DFT algorithms, and spectral analysis are discussed. IIR and FIR digital filter design is a focus; stochastic and deterministic signals are introduced. MATLAB exercises are a significant part of the course.

Fall ENGN2530 S01 15472 MWF 11:00-11:50(16) (H. Silverman)

ENGN 2540. Speech Processing. The basics for speech production and hearing are introduced. PDEs and simplified vocal-tract models are derived. LPC, DFT filterbank and time varying signal processing for speech recognition analysis are discussed in mathematical detail. Dynamic programming, vector quantization, hidden Markov modeling, and neural-network pattern recognition for speech are introduced. Offered every other year.

Spr ENGN2540 S01 25352 MWF 11:00-11:50(04) (H. Silverman)
ENGN 2750. Chemical Kinetics and Reactor Engineering.
This course focuses on the fundamentals of chemical kinetics with engineering applications. Topics include: quantum chemistry, statistical thermodynamics, and transition state theory; tight versus loose transition states; the kinetics of gases, liquids, and surfaces; adsorption, desorption, surface diffusion; enzyme kinetics and biological processes; formation, solution, and interpretation of elementary mechanisms; global versus local sensitivity analysis; uncertainty quantification; and the coupling between fluid dynamics and chemical reactions.

Spr ENGN2750 S01 25314 MWF 1:00-1:50(06) (C. Goldsmith)

ENGN 2760. Heat and Mass Transfer.

Spr ENGN2760 S01 25293 MWF 10:00-10:50(03) (J. Liu)

ENGN 2770. Atomatic Reaction Engineering.
Covers the principles of operation of heterogeneous catalysis and advanced reaction engineering with an emphasis on catalysis theory. Includes electronic structure calculations, linear scaling relations, free energy relations, surface reactivity, rate theory, and electrocatalytic concepts. Applications of study in this course will focus on catalysts for energy conversion. Students should have a background in chemical reactions and thermodynamics.

Fall ENGN2770 S01 15484 TTh 1:00-2:20(10) (A. Peterson)

ENGN 2810. Fluid Mechanics I.
Formulation of the basic conservation laws for a viscous, heat conducting, compressible fluid. Molecular basis for thermodynamic and transport properties. Kinematics of vorticity and its transport and diffusion. Introduction to potential flow theory. Viscous flow theory: the application of dimensional analysis and scaling to obtain low and high Reynolds number limits.

Fall ENGN2810 S01 15473 MWF 2:00-2:50(07) (K. Breuer)

ENGN 2910G. Topics in Translational Research and Technologies.
To improve human health, engineering and scientific discoveries must be explored in the context of application and translated into human/societal value. Translational research is creating a fundamental change in the way basic science and engineering research has operated for decades, breaking down the literal and figurative walls that separate basic scientists/ engineers and clinical researchers. Such discoveries typically begin at "the bench" with basic research—and in the field of medicine—then progress to the clinical level, or the patient's "bedside." This seminar course will utilize case studies to demonstrate to students how the translational research unfolds. Lectures will be delivered by clinicians, medical researchers, engineers, and entrepreneurs, with case studies focused on topics ranging from value creation, IRB, HIPAA, FDA approval, etc.

Spr ENGN2910/G S01 25295 F 3:00-5:30(15) (A. Tripathi)

ENGN 2910S. Cancer Nanotechnology.
This course will integrate engineering and biomedical approaches to diagnosing and treating cancer, particularly using nanotechnology and BioMEMS. Topics will include the extracellular matrix and 3D cell culture, cancer cell invasion in microfluidic devices, heterotypic interactions, cancer stem cells and the epithelial-mesenchymal transition, angiogenesis and drug targeting, circulating tumor cells and biomarker detection, as well as molecular imaging and theranostics. Recommended coursework includes ENGN 1110 (Transport and Bioransport), ENGN 1210 (Biomechanics) and ENGN 1490 (Biomaterials) or equivalents.

Spr ENGN2910S S01 25296 MW 1:00-1:50(08) (I. Wong)

ENGN 2912B. Scientific Programming in C++
Introduction to the C++ language with examples from topics in numerical analysis, differential equations and finite elements. As a prerequisite, some programming knowledge, e.g., MATLAB projects. The course will cover the main C++ elements: data types; pointers; references; conditional expressions; streams; templates; Standard Template Library (STL); design and debugging techniques.

Fall ENGN2912B S01 15474 MW 5:40-7:00 (G. Taubin)

ENGN 2912E. Low Power VLSI System Design.
This course deals with the design of digital systems for low power dissipation. Issues that will be addressed include CMOS power dissipation, analysis and design tools used for lower power digital circuits, design methodologies for low power CMOS circuits, low power architecture designs, and a discussion on future challenges in low power digital design. Prerequisites: familiarity with basic MOSFET structure and computer architecture principles; some circuit analysis helpful.

Fall ENGN2912E S01 16712 MW 8:30-9:50(01) (R. Bahar)

ENGN 2912F. Soft Matter.
This course is a special topics graduate course on soft matter, treating polymers, liquid crystals, surfactants, and colloids. The different topics will be unified by a common approach using statistical mechanical methods.

Fall ENGN2912F S01 15483 TTh 9:00-10:20(08) (T. Powers)

ENGN 2912J. Asymptotic and Perturbation Methods.
In this introductory course to perturbation methods, topics covered are inspired by problems in solid mechanics (e.g. ridges and kinks in thin plates), fluid mechanics (e.g. viscous boundary layers), electrical circuits (van der Pol oscillator), and include regular and singular perturbations, methods of strained coordinates, multiple scales, averaging, WKBJ, Laplace's method and the method of steepest descent for approximating integrals, and solutions of partial differential equations. Prerequisite: ENGN 2010 and 2020.

Spr ENGN2912J S01 25353 M 3:00-5:30(13) (S. Mandre)

ENGN 2912K. Mixed-Signal Electronic Design.
ADCs, DACs, switched-capacitor circuits, noise and distortion. Circuit simulation and system design projects. Examples will be used from various biological sensing and instrumentation applications and recent scientific literature. Prerequisite: ENGN 1620 and 1630, or instructor permission. Enrollment limited to 20.

Fall ENGN2912K S01 15482 MWF 2:00-2:50(07) (J. Rosenstein)

This class describes the fundamentals of statistical mechanics with a focus on both traditional analytic methods and modern atomistic simulations methods. The class is divided in two parts. (i) Techniques used to calculate interactions at the atomic level are first covered, from simple interatomic potentials to quantum mechanical first-principles methods. (ii) Simulations techniques to sample atomic degrees of freedom for obtaining macroscopic quantities are then discussed, such as Monte Carlo and Molecular Dynamics. The tools presented in class are illustrated with ongoing examples that illustrate how these methods work in concert. Enrollment limited to 40 graduate students.

Spr ENGN2930 S01 25308 M 3:00-5:30(13) (A. Van De Walle)

ENGN 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall ENGN2970 S01 14975 Arranged 'To Be Arranged'
Spr ENGN2970 S01 24002 Arranged 'To Be Arranged'

ENGN 2980. Special Projects, Reading, Research and Design.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ENGN 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

Fall ENGN2990 S01 14976 Arranged 'To Be Arranged'
Spr ENGN2990 S01 24003 Arranged 'To Be Arranged'

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
English

ENGL 0100A. How To Read A Poem.

It is difficult/ to get the news from poems/ yet men die miserably every day/ for lack/ of what is found there. William Carlos Williams’s words begin to articulate this course’s focus on the power of poetic language to represent and to give shape to human experience. Designed for concentrators and non-concentrators, the semester’s work consists of both conceptual and practical matters conducive to understanding, analyzing, and writing about poems. The reading draws freely on texts from across historical and geographical boundaries, including works by Spenser, Shakespeare, Landey, Donne, Keats, Dickinson, Frost, Auden, Whitman, Eliot, cummings, Bishop, and Heaney.

Spr ENGL0100A S01 25137 TTh 1:00-2:20(10) (M. Rabb)

ENGL 0100F. Devils, Demons, and Do Gooders.

Who hasn’t struggled with the problem of good and evil? Who hasn’t wondered what lurks in the dark recesses of the soul? We will investigate how Milton, Mary Shelley, Melville, Poe, and Hawthorne, among others, grapple with these fundamental questions of judgment.

Spr ENGL0100F S01 24484 MWF 9:00-9:50(02) (J. Egan)

ENGL 0100J. Cultures and Countercultures: The American Novel after World War II.

A study of the postwar American novel in the context of the intellectual history of the 1950s, 1960s, and 1970s. We will read the postwar novel in relation to the affluent society, the vital center, the lonely crowd, the power elite, the one-dimensional man, the post-industrial society. Authors to be considered include Baldwin, Bellow, Ellison, Highsmith, McCarthy, O’Connor, Petry, Pynchon, and Roth. Two lectures and one discussion meeting weekly. Students should register for ENGL 0100J S01 and may be assigned to conference sections by the instructor during the first week of class.

Fall ENGL0100J S01 16526 MWF 11:00-11:50(16) (D. Nabers)

ENGL 0100M. Writing War.

Examines the challenges that war poses to representation, and particularly to language and literary expression in the modern era. We will focus primarily on the First and Second World Wars, exploring the specific pressures war puts on novels and poetry, as well as on history, psychology, and ethics. Works by Sassoon, Owen, Hemingway, Woolf, Rebecca West, Graham Greene, Pat Barker, Tim O’Brien, Georges Perec. Students should register for ENGL 0100M S01 and may be assigned to conference sections by the instructor during the first week of class.

Fall ENGL0100M S01 16527 MWF 2:00-2:50(07) (R. Reichman)

ENGL 0100N. City Novels.

This course examines 20th and 21st century novels to consider how these narratives envision the city, its possibilities and limits. How does the city shape how we think, wander, grow up, see and know each other? How does the city divide people? How does the novel imagine ways to bridge these divisions? Readings by Woolf, Chandler, Wright, Cisneros, Smith, Calvino, Adiga, Whitehead.

Spr ENGL0100N S01 24485 TTh 2:30-3:50(11) (T. Katz)

ENGL 0100P. Love Stories.

What do we talk about when we talk about love? We will see how writers have addressed this question from Shakespeare’s day to the present. Writers may include Shakespeare, Austen, Eliot, Flaubert, Graham Greene, Marilynne Robinson, and/or others. Students should register for ENGL 0100P S01 and may be assigned to conference sections by the instructor during the first week of class. WRIT

Fall ENGL0100P S01 16552 MWF 10:00-10:50(14) (J. Kuzner)

ENGL 0100Q. How Poems See.

What makes poems and pictures such powerful forms of life? Why do pictures have so much to tell us? How do we see things in words? How do graphic images, optical images, verbal images, and mental images together constitute ways of understanding the world? Looking at poems and images from Giotto and Shakespeare, Wordsworth and Dickinson and Turner through such modern poets and painters as Stevens, Ashbery, Warthol and Hejinian, we will study sensory and symbolic images, the uses and dangers of likeness, and the baffling confluence of concrete and abstract, literal and figurative, body and mind, matter and spirit.

Fall ENGL0100Q S01 16553 MWF 1:00-1:50(06) (S. Foley)

ENGL 0100R. American Histories, American Novels.

How do novels make readers experience such traumatic American historical events as war, slavery, genocide, race riots and other forms of violent civil conflict? What kind of political or ethical perspective on such divisive and explosive events do literary narratives encourage their readers to take? How can novels function as memorials to such events? What forms of redress can come through literature? This course explores these questions by examining a number of important post-1945 works that offer powerful examples of how novels make us think and feel in particularly resonant ways about the histories they depict. DPLL WRIT

Spr ENGL0100R S01 24486 MWF 11:00-11:50(04) (D. Kim)

ENGL 0100S. Being Romantic.

“Romantic literature” and “Romantic art” are familiar concepts in the history of culture. But what does “Romantic” actually mean? Were Coleridge and Keats especially dedicated to writing about erotic love? Why would “Romantic” literature emerge during the period of the French Revolution and Industrial Revolution? What does early 19th-century “Romanticism” have to do with the meaning and status of the “Romantic” in our culture today? Readings in British and American writing from Blake and Mary Shelley to Ani DiFranco and Rage Against the Machine.

Fall ENGL0100S S01 16525 TTh 10:30-11:50(13) (W. Keach)

ENGL 0105C. The Medieval King Arthur.

Where did stories of King Arthur come from and how did they develop in the Middle Ages? We will read the earliest narratives of King Arthur and his companions, in histories and romances from Celtic, Anglo- Norman, and Middle English sources, to examine Arthur’s varying personas of warrior, king, lover, thief. Enrollment limited to 20 first-year students. FYS WRIT

Fall ENGL0105C S01 15574 TTh 9:00-10:20(08) (E. Bryan)

ENGL 0105E. Love and Friendship.

What do we talk about when we talk about love? This course poses this question in various ways. How, for instance, can we tell the difference between love’s various forms—between love that is friendly and love that is romantic? How do the different forms of love differently shape people? How does love work when it involves sex, or marriage, or children, or divinity? And what must love involve to be called “good”? Why? Materials will range from Plato and St. Augustine to Leo Bersani and Allen Bloom and will also include popular filmic representations of love. Limited to 20. FYS

Spr ENGL0105E S01 24488 W 3:00-5:30(14) (J. Kuzner)

ENGL 0105Q. Realism and Modernism.

The novel as a genre has been closely identified with the act of representation. What it means to represent “reality,” however, has varied widely. This seminar will explore how the representation of reality changes as modern fiction questions the assumptions about knowing, language, and society that defined the great tradition of realism. English and American novels will be the primary focus of our attention, but influential French, German, and Russian works will be studied as well. Limited to 20 first-year students. Banner registration after classes begin requires instructor approval. FYS

Fall ENGL0105Q S01 15575 TTh 10:30-11:50(13) (P. Armstrong)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGL 0150X. The Claims of Fiction.
This course explores the interplay of tropes of strangeness, contamination, and crisis in a range of novels and shorter fiction, in English or in translation. We will ask why social misfits and outsiders somehow become such fascinating figures in fictional narratives. How do these fictions entice and equip readers to reflect on collective assumptions, values, and practices? Writers will likely include Baldwin, Brontë, Condé, Conrad, Faulkner, Greene, Ishiguro, Lessing, Morrison, Naipaul, Salih. Limited to 20 first-year students. DPLL FYS Spr ENGL0150XS01 24489 TTh 9:00-10:20(01) (O. George)

ENGL 0150Y. Brontës and Brontëism.
The novels of Anne, Charlotte, and Emily Brontë alongside works (fiction and film) influenced by or continuing their powerful (and competing) authorial visions: *Wide Sargasso Sea* (Rhys), *Rebecca* (Hitchcock), *The Piano* (Campion), and *Suspiria* (Argento). Among other questions, we will discuss the role of Romanticism, feminism, the bodily imaginary, colonialism, and genre. Enrollment limited to 20 first-year students. FYS Fall ENGL0150YS01 15576 M 3:00-5:30(15) (B. Parker)

ENGL 0200W. Tragic Variation: Classical, Early Modern, Contemporary.
The genre of tragedy has been one of the most hotly contested and theorized topics in the Western canon, yet today, commonplace events are routinely deemed tragic. This seminar examines the history of tragedy by considering representative and foundational literary and philosophical texts (Shakespeare, Aristotle, Sophocles, Milton, Marlowe, and Nietzsche) to understand the "tragic": catharsis, revenge, fate, pity, etc. Enrollment limited to 17 undergraduate students. WRIT Fall ENGL0200WS01 16584 MWF 1:00-3:00(06) (A. Madani)

ENGL 0200X. Unrealism: Science Fiction and Speculative Literature.
What can other worlds and other species tell us about how we see our own? This course will explore issues of gender, sexuality, technology and identity across sci-fi and fantasy literature, in addition to comics, TV and film. Texts will likely include: *China Mieville, Ursula LeGuin, Octavia Butler, Samuel Delany, Sandman*, *Doctor Who, Star Trek, Sense8*. Enrollment limited to 17 undergraduate students. WRIT Fall ENGL0200XS01 25411 MWF 9:00-9:50(02) (M. Cunniff)

ENGL 0200Y. Graphic Memories: Form and Representation in the Contemporary Graphic Novel.
How do graphic novels tell stories—whether personal or historical—through their visual-literary form? This course critically examines the representation of identity and difference, traumatic memory, and perspectival experience within memoir and documentary genres. May include works by: Alison Bechdel, Art Spiegelman, Marjane Satrapi, Shaun Tan, Keiji Nakazawa, and Lynda Barry; Butler, Barthes, and Cathy Caruth. Enrollment limited to 17 undergraduate students. WRIT Spr ENGL0200YS01 25143 MWF 10:00-10:50(03) (C. Grandy)

ENGL 0200Z. Who Are You to Judge? Modernist Fiction and Judgments.
Literature both judges and is judged. It features scenes of judgment, and calls on readers to judge and interpret it. This course examines the ways in which early twenty-century texts scrutinize ethical assumptions, form verdicts, and interrogate the position from which one judges. Authors: Melville, Kafka, Nabokov, Ford, Hurston, Ishiguro, Wright, Brecht, and Larson. Enrollment limited to 17 undergraduate students. WRIT Spr ENGL0200ZS01 25142 MWF 11:00-11:50(04) (Z. Krowiak)

ENGL 0201B. Wrong Girls: Unwelcome, Unnerving and Undesirable Genders.
Unpleasing women appear throughout fiction: this course will address novels, films and critical theory from the Victorian to the contemporary which align the nasty, the ugly and the unwelcome with gender. Authors and critics include Eliot, Brontë, James, Ford, Atwood, Tan, Barthes, Butler, hooks and Gilbert & Gubar. Films include *Whatever Happened to Baby Jane?*, *Rosemary's Baby and Princess Mononoke*. Enrollment limited to 17 undergraduate students. WRIT Spr ENGL0201BS01 25141 MWF 1:00-1:50(06) (E. Rowe)

ENGL 0310A. Shakespeare.
We will read a representative selection of Shakespeare’s comedies, tragedies, histories, and romances, considering their historical contexts and their cultural afterlife in terms of belief, doubt, language, feeling, politics, and form. Students should register for ENGL 0310A S01 and may be assigned to conference sections by the instructor during the first week of class. WRIT Fall ENGL0310AS01 15569 MWF 10:00-10:50(14) (S. Foley)
Spr ENGL0310AS01 24490 TTh 10:30-11:50(09) (J. Kuzner)

ENGL 0510D. Mark Twain's America.
A course for all kinds of readers of Twain and his contemporaries. Close readings of fiction and essays that focus on race, slavery, capitalism, and the development of "modern" literature. Works include *Puddinhead Wilson*, *Huck Finn*, and *Connecticut Yankee*. Fall ENGL0510CS01 15577 TTh 1:00-2:20(10) (P. Gould)

A study of major novelists of the period, through the question: How did the novel develop as a form of social understanding? We will be looking at novels as bearers of social values, especially around questions of property, class, marriage, work, bureaucracy and the state, and selfhood. Authors studied: Jane Austen, Emily Brontë, Charles Dickens, Anthony Trollope, and Thomas Hardy. Spr ENGL0511BS01 24491 TTh 9:00-10:20(01) (B. Parker)

ENGL 0511E. Melville, Conrad, and the Sea.
Stories begin with the sea: *Jason and the Argonauts*, *Sinbad and the Seven Seas*, *Suspiria* and *Suspiria*. The sea is the place of "tall tales," of adventure, and of terror, but also of industrial labor and modern commerce. This class reads the sea narratives of Herman Melville and Joseph Conrad within this larger narrative and historical context. Fall ENGL0511ES01 15570 MWF 11:00-11:50(16) (S. Burrows)

ENGL 0511F. Literature Reformatted.
We’ll put literary works produced for digital environments (novels on Twitter, poems with hyperlinks, collaborative fiction on chat forums) in conversation with works of literature, such as Shakespeare’s First Folio, produced in traditional forms. Do these new formats allow for us to explore extensions of the literary, or do they threaten the very forms of literature from which we can profit the most? Fall ENGL0511FS01 15571 MWF 10:00-10:50(14) (J. Egan)

ENGL 0710B. African American Literature and the Legacy of Slavery.
Traces the relationship between the African American literary tradition and slavery from the antebellum slave narrative to the flowering of historical novels about slavery at the end of the twentieth century. Positions these texts within specific literary, historical, and political frameworks. Authors may include Frederick Douglass, Harriet Jacobs, Charles Chesnutt, Octavia Butler, and Toni Morrison. DPLL Fall ENGL0710BS01 15579 MWF 11:00-11:50(16) (R. Murray)

ENGL 0710Q. American Literature in the Era of Segregation.
This course examines how American literature intersects with the legal, ethical, and racial discourses that defined the system of racial segregation. The class will assess literary works in relation to the discourses employed historically to rationalize segregation. In addition the course will explore the ways that literary style and genre became inseparable from the culture of segregation. Authors include Mark Twain, Nella Larsen, William Faulkner, and Ralph Ellison. DPLL Spr ENGL0710QS01 24487 TTh 10:30-11:50(09) (R. Murray)

ENGL 0710S. The Eighties: Earnestness to Irony.
From "White Noise" to "Working Girl," *Duran Duran* to *Public Enemy*, this course explores the culture, rhetoric, and politics of the 1980s through literature, film, music, and television. What kind of counterculture, if any, emerges from a decade of conservatism, greed and the AIDS epidemic? What, in short, made the 80s unique—and what is the decade's afterimage? Students should register for ENGL 0710S S01 and may be assigned to conference sections by the instructor during the first week of class. Spr ENGL0710SS01 25140 MWF 1:00-5:00(06) (R. Reichman)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGL 0900. Critical Reading and Writing I: The Academic Essay. An introduction to university-level writing. Students produce and revise multiple drafts of essays, practice essential skills of paragraph organization, and develop techniques of critical analysis and research. Readings from a wide range of texts in literature, the media, and academic disciplines. Assignments move from personal response papers to formal academic essays. Enrollment limited to 17. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 0930. Introduction to Creative Nonfiction. Designed to familiarize students with the techniques and narrative structures of creative nonfiction. Reading and writing focus on personal essays, memoir, science writing, travel writing, and other related subgenres. May serve as preparation for any 1000-level nonfiction writing course. Writing sample may be required. Enrollment limited. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1030A. The Thoughtful Generalist. This "ONLINE" section of "ENGL1030: Critical Reading and Writing II: Research" will prepare you for academic and real-world discourse. In Canvas, you will discuss essays demonstrating deep research distilled into engaging intellectual journey. You will research and revise four explanatory, analytical, persuasive essays, using varied sources to explore subjects or issues of your choice. Mandatory peer reviews and conferences ONLINE and in person. Enrollment limited to 17. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1030C. Writing Science. This course explores how science, as an academic way of thinking and a method, affects our critical thinking and expression of culture. Readings examine the various dialects of scientific discourse. Students write three major research essays on self-selected scientific topics from both within and outside their fields of study. Enrollment limited to 17. Writing sample may be required. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1030D. Myth + Modern Essay. A writing and research focused course, in which students read a small selection of ancient texts (including The Epic of Gilgamesh and Ovid's Metamorphoses) and use the myths retold to illuminate the contemporary world and to inform the essays they write. Enrollment limited to 17. Writing sample may be required. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1030F. The Artist in the Archives. While artists can benefit greatly from archival work, they are not typically given the tools to make use of these institutions. This writing intensive course takes a two pronged approach to the problem: embedding students in archives both at Brown and RISD to produce creative, lyrical, and multimedia essays; and exploring how artists have used these institutions for information and inspiration. Enrollment limited to 17. Writing sample may be required. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1050A. Narrative. This course offers a broad exploration of the many kinds of essays you can write in creative nonfiction. We will be looking at how authors structure their pieces and the range of narrative techniques they often use. You can expect workshops, in-class prompts and readings by Jamaica Kincaid, John McPhee, David Foster Wallace, Annie Dillard, David Sedaris and others. Enrollment limited to 17. Writing sample required. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1050G. Journalistic Writing. This course, taught by a Pulitzer Prize-winning reporter, teaches students how to report and write hard news and feature stories. Students learn to gather and organize material, develop in-depth interviewing techniques, use public records to report stories and become better observers of everyday life. The first half of the semester focuses on hard news and investigative reporting – crime, government and court news. The second half is devoted to feature writing – profiles and the art of narrative storytelling. Class list will be reduced to 17 after writing samples are reviewed. Banner registrations after classes begin require instructor approval. S/NC.

ENGL 1050H. Journalistic Writing. This course teaches students how to report and write hard news and feature stories for newspapers and online. Students learn to gather and organize material, develop interviewing techniques, and hone their writing skills – all while facing the deadlines of journalism. The first half of the semester focuses on "hard" news: issues, crime, government, and courts. The second half is devoted to features, profiles, and narrative story telling. Writing sample required. Class list will be reduced to 17 after writing samples are reviewed in first week of classes. Banner registrations after classes begin require instructor approval. S/NC.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGL 1050N. Writing for Today's Media.
This course introduces students to the practice of reporting for television news, radio, and their online equivalents—online news and podcasts. Exploring the world of communications for contemporary media, the course features hands-on work in writing news, features, and opinion pieces for television, radio, online news, and podcasts. Students will develop skills in analyzing, writing, revising, and workshops in these media. Enrollment limited to 17. Writing sample required. Banner registrations after classes begin require instructor approval. S/NC.

Spr ENGL1050N S01 24505 TTh 1:00-2:20(10) (J. Readley)

ENGL 1140D. Writing Diversity: A Workshop.
This course explores various forms of writing that address the broad spectrum of human experience, including issues of race, gender, varying physical and mental ability, social class, and inequities resulting from colonization, among others. Students will attempt to understand the issues and each other through class readings and articulating personal responses in writing. Writing sample required. Pre-requisite: ENGL 0900, ENGL 0930, or any 1000-level nonfiction writing course. Class list reduced to 12 after writing samples are reviewed during the first week of classes. S/NC.

DPLL
Fall ENGL1140D S01 15606 TTh 2:30-3:50(03) (C. DeBoer-Langworthy)

ENGL 1160F. Reporting Crime and Justice.
Crime and justice stories are people stories. The drama of everyday life is played out every day in courtrooms. This advanced journalism course will get students into the courtrooms, case files and archives of Rhode Island's judicial system and into committee hearings at the State House where they will report on stories that incorporate drama, tension, and narrative storytelling. Prerequisite: ENGL1050G, ENGL1050H or ENGL1160A (Advanced Feature Writing). Enrollment limited to 17. Instructor permission required. Preference will be given to English concentrations. S/NC.

Spr ENGL1160F S01 24500 M 3:00-5:30(13) (T. Breton)

ENGL 1160K. Literary Reporting: Writing Literature on Deadline.
How does a writer go into the world, observe closely, and turn those observations into something artful? Students will read and discuss works in the genre, and produce their own. Enrollment limited to 12. Prerequisites: ENGL0900, ENGL0930, or any intermediate or advanced nonfiction course. Preference will be given to English concentrations. Writing sample may be required. Banner registrations after classes begin require instructor approval. S/NC.

Fall ENGL1160K S01 16519 M 3:00-5:30(15) "To Be Arranged"

ENGL 1180B. Digital Nonfiction.
Digital Nonfiction is an opportunity to explore the fundamental differences between print and digital narratives. Focusing on three short assignments and one longer project, this class encourages students to learn by doing. Additionally, students develop their digital fluency by exploring a variety of platforms and readings. Digital Nonfiction is an advanced creative nonfiction class that requires ENGL 0930 or any 1000-level nonfiction writing course. Enrollment is limited to 17. Instructor permission required.

Spr ENGL1180B S01 24501 M 3:00-5:30(13) (M. Stewart)

ENGL 1180C. Advanced Creative Nonfiction: Writing with Food.
This course examines writing about food and how writing affects food and culture. We shall explore the relationship of food to the pen through reading classic texts, writing in and out of class, guest lectures, and touring culinary archives. The goal is to polish personal voice in menus, recipes, memoir, history, reportage, and the lyric essay. Prerequisite: ENGL 0930 or any 1000-level nonfiction writing course. Class list will be reduced to 17 after writing samples are reviewed during the first week of classes. Preference will be given to English concentrations. Banner registrations after classes begin require instructor approval. S/NC.

Spr ENGL1180C S01 24506 MW 10:00-11:20 (C. DeBoer-Langworthy)

ENGL 1180H. Satire and Humor Writing.
For the advanced writer. This course will introduce students to the practice of writing satire and humorous essays. Readings will include works by Jonathan Swift, Mark Twain, Garrison Keillor, Bill Bryson, David Foster Wallace, David Sedaris, and others, and students will develop skills in analyzing, writing, and workshops in the genre. Prerequisite: ENGL 0930 or any 1000-level nonfiction writing course. Class list will be reduced to 17 after writing samples are reviewed during the first week of classes. Preference will be given to English concentrations. Banner registrations after classes begin require instructor approval. S/NC.

Spr ENGL1180H S01 24497 Th 4:00-6:30(17) (J. Readley)

ENGL 1180K. The Art of Literary Nonfiction.
For the advanced writer. Based on Roland Barthes’ notion of the fragment, this workshop features an incremental, literary approach to writing nonfiction, in both traditional and experimental formats. In response to daily assignments, students will produce numerous short pieces and three extended "essays," to be gathered into a chapbook at the end of the course. Writing sample required. Prerequisite: ENGL0930 or any 1000-level nonfiction writing course. Not open to first year students. Class list reduced to 17 after writing samples are reviewed during first week of classes. Preference given to English concentrators. Banner registrations after classes begin require instructor approval. S/NC.

Spr ENGL1180K S01 24498 Th 2:30-3:50(11) (C. Imbriglio)

ENGL 1180P. Further Adventures in Creative Nonfiction.
For the advanced writer. A workshop course for students who have taken ENGL 0180 or the equivalent and are looking for further explorations of voice and form. Work can include personal essays, literary journalism and travel writing. Readings from Ian Frazier, Joan Didion, David Sedaris, John McPhee and others. Writing sample required. Prerequisite: ENGL 0930 or any 1000-level nonfiction writing course. Class list will be reduced to 17 after writing samples are reviewed during the first week of classes. Preference will be given to English concentrators. Banner registrations after classes begin require instructor approval. S/NC.

Fall ENGL1180P S01 15605 TTh 1:00-2:20(10) (E. Hardy)

ENGL 1180U. Testimony.
How does the creative nonfiction writer bear witness to profound political, social, and environmental change? In this course students engage with the world as writers. They will conduct extensive interviews within the Brown community and beyond and will turn those first hand testimonials into a suite of creative nonfiction pieces in various genres including the lyric, personal, “found,” and multi-media essay. Writing sample required. Prerequisite: ENGL 0930 or any 1000-level nonfiction writing course. Class list will be reduced to 17 after writing samples are reviewed during the first week of classes. Preference will be given to English concentrators. S/NC.

Fall ENGL1180U S01 16520 TTh 4:00-6:30(09) "To Be Arranged"

ENGL 1190M. The Teaching and Practice of Writing: Writing Fellows Program.
This course prepares students for their work as Writing Fellows. Course readings, activities, and assignments introduce students to: post-process writing theory and pedagogy; data-based investigations of the revision habits of experienced and inexperienced writers; and effective methods for responding to student writing and conferencing with student writers. Enrollment is restricted to undergraduates who have been accepted into the Writing Fellows Program in the preceding July. Banner registrations after classes begin require instructor approval. S/NC.

Fall ENGL1190M S01 16518 TTh 10:30-11:50(13) (S. Kastner)

ENGL 1190S. Poetics of Narrative.
Narratives are everywhere, simply there, like life itself, Roland Barthes says; we structure our experiences with narratives that we either infer or create. We will read different literary genres to see how narratives work and what makes them poetic and read theoretical texts to understand narrative function and performance. We will write experimentally to experience how stories are constructed. Pre-requisites: ENGL 0900, 0930, or any 1000-level nonfiction writing course. S/NC.

Spr ENGL1190S S01 24499 MWF 11:00-11:50(04) (L. Stanley)
ENGL 1190U. Nature Writing.
This course seeks to develop your skills as a sensitive reader and writer of the natural world. You will build a portfolio of revised work through a process of workshops, tutorials, and conferences, and engage in discussion of a range of written and visual narratives with reference to their personal, political, and ecological contexts. Writing sample required. Prerequisite: ENGL 0930 or any 1000-level nonfiction writing course. Class list will be reduced to 17 after writing samples are reviewed during the first week of classes. Preference will be given to English concentrations. S/NC.
Fall ENGL1190US01 15604 T 4:00-6:30(09) (R. Ward)

ENGL 1190V. Languages of Conscience: Slave Narratives, Prison Writing, and Abolition.
We'll read and respond to nonfiction writings that arise from chattel slavery in the U.S. and one element of its afterlife, the prison system: their goals, their styles, their strategies. Writings will include analytical and creative responses to these works. The Center for Slavery and Justice will be a resource for us. Enrollment limited to 17. No pre-requisites. Writing sample required. S/NC.
Spr ENGL1190VS01 24507 W 3:00-5:30(14) (K. Schapira)

ENGL 1200. Independent Study in Nonfiction Writing.
Tutorial instruction oriented toward some work in progress by the student. Requires submission of a written proposal to a faculty supervisor. Section numbers vary by instructor. Instructor permission required. S/NC.
ENGL 1310H. The Origins of American Literature.
Where does American literature begin? Can it be said to have a single point of origin? Can writings by people who did not consider themselves American be the source of our national literary tradition? Does such a tradition even exist and, if so, what are its main characteristics? How does one understand the various diverse traditions that constitute American literature, including African-American, Native American, and many others, into a single object of study--or does one even need to? Authors may include de Vaca, Anne Bradstreet, Benjamin Franklin, and Phillis Wheatley. WRIT
Spr ENGL1310HS01 24493 MWF 2:00-2:50(07) (J. Egan)

ENGL 1310T. Chaucer.
Texts in Middle English by Geoffrey Chaucer including the romance Troilus and Criseyde; dream vision poems Book of the Duchess, House of Fame, and Parliament of Fowls; Chaucer's translation of Boethius's Consolation of Philosophy; his shorter poems, and two Canterbury Tales. Prior knowledge of Middle English not required. Not open to first-year students.
Fall ENGL1310TS01 15580 TTh 1:00-2:20(10) (E. Bryan)

ENGL 1361G. Tolkien and the Renaissance.
This course explores the work of J.R.R. Tolkien alongside Renaissance forseurs such as Shakespeare, Spenser, Milton and others. Topics to include love and friendship, good and evil, violence and nonviolence, and how literature offers distinctive forms of life. Enrollment limited to 20.
Fall ENGL1361GS01 16551 W 3:00-5:30(17) (J. Kuzner)

ENGL 1361H. Shakespearean Comedy.
We will read a selection of Shakespeare's comedies with attention to his European sources and analogues. Consideration of both formal and historical questions including genre, convention, the Shakespearean text, gender, sexuality, status and degree, and nation. Not open to first-year students. Enrollment limited to 20.
Fall ENGL1361HS01 15572 W 3:00-5:30(17) (K. Newman)

ENGL 1380. Undergraduate Independent Study in Medieval and Early Modern Literatures.
Tutorial instruction oriented toward a literary research topic. Section numbers vary by instructor. Instructor permission required.
ENGL 1510A. Jane Austen and Her Predecessors: The Other History of the Novel.
This course focuses on the novels of Jane Austen — from Sense and Sensibility to Persuasion. The course first establishes some familiarity with the earlier women writers of narrative fiction, in order to gain a deeper understanding of the development of the novel and of Austen's place in that rich tradition. Additional readings include work by Aphra Behn, Eliza Haywood, Charlotte Lennox, Elizabeth Inchbald, and Mary Wollstonecraft.
Spr ENGL1510AS01 24464 TTh 10:30-11:50(09) (M. Rabb)

ENGL 1511X. Capital and Culture.
An introduction to the literature and culture of the Victorian period through the categories and questions of political economy: especially the making of the working class, finance, and industrialization. The objective is twofold: to examine novelists, poets, and prose writers in the light of Karl Marx's influential analysis of capitalist society, but also to contextualize and situate Marx as a Victorian, who lived in London for the majority of his life.
Fall ENGL1511XS01 15573 MWF 9:00-9:50(01) (B. Parker)

ENGL 1511Y. Emily Dickinson and the Theory of Lyric Form.
This class examines the extraordinary work of Emily Dickinson in an attempt to understand what lyric poetry is and how it works. We will read a generous sampling of Dickinson's poetry as well as a number of the major theoretical accounts of the lyric. Enrollment limited to juniors and seniors.
Spr ENGL1511YS01 24513 TTh 2:30-3:50(11) (S. Burrows)

ENGL 1560W. Getting Emotional: Passionate Theories.
This course examines connections between emotion, feeling, and affect in several key texts from 18th-, 19th-, and 20th-century literatures. We will ask how and why affect becomes a central concept for writers and thinkers in the Enlightenment, and chart the ways in which affect productively opens up onto contemporary theorizations of identity, gender, sexuality, and race. Possible authors include: Wordsworth, Austen, Blake, Equiano, Coleridge, Keats, Shelley, Wilde, Pater, Kant, Melville, Hofmannsthal, Hume. Films by Todd Haynes, McQueen, Campion, Frampton. Theoretical readings by Berlant, Ellison, Terada, Deleuze, Stewart. Enrollment limited to 20 juniors and seniors.
Fall ENGL1560WS01 15583 TTh 9:00-10:20(08) (J. Khalip)

ENGL 1561D. Writing and the Ruins of Empire.
An exploration of literary representations of "empire" and "imperialism" from the 18th century to the present. Readings in Gibbon's Decline and Fall of the Roman Empire, Volney's Ruins of Empire, and a wide range of 19th- and 20th-century texts. Some consideration of theories of imperialism and of visual representations of cultures of empire. Enrollment limited to 20. Prior coursework in 18th- and 19th-century literature advised. WRIT
Fall ENGL1561DS01 15584 T 4:00-6:30(09) (W. Keach)

Tutorial instruction oriented toward a literary research topic. Section numbers vary by instructor. Instructor's permission required.
ENGL 1710L. Harlem Renaissance: The Politics of Culture.
The Harlem Renaissance was a remarkable flowering of culture in postwar New York as well as a social movement that advanced political agendas for the nation. This course takes up the relationship between literature and politics by exploring such matters as the urbanization of black America, the representation of the black poor, the influence of white patronage, and the rise of primitivism. Writers may include Hughes, Hurston, Larsen, Fisher, Locke, and McKay. DPLL
Spr ENGL1710LS01 24495 TTh 2:30-3:50(11) (R. Murray)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGL 1710J. Modern African Literature.
This course considers themes, antecedents, and contexts of modern African literature and related forms. Our readings will include fiction in English or in translation, traditional oral forms like panegyric and festival poetry, and some films. We will examine how these diverse materials explore the interplay of ethnicity, nationality, and race. We will also address the issue of "tradition" in contexts where nationalisms of various stripes are becoming stronger, even as the world becomes more interconnected through trade, immigration, and digital technology. Authors include Achebe, Cole, Dangarembga, Farah, Gordimer, Ngugi, Salih, Soyinka, Wicomb. Films by Biokamp, Loreau, Sembène. DPLL
Fall ENGL1710JS01 24496 TTh 1:00-2:20(10) (O. George)

ENGL 1710K. Literature and the Problem of Poverty.
Explores poverty as a political and aesthetic problem for the American novelist. Examines the ways that writers have imagined the poor as dangerous others, agents of urban decay, bearers of folk culture, and engines of class revolt. Also considers these literary texts in relation to historical debates about economic inequality. Writers may include Crane, Faulkner, Wright, Steinbeck, and Hurston.
Fall ENGL1710KS01 15585 MWF 2:00-2:50(07) (R. Murray)

ENGL 1710L. Modernism and Everyday Life.
We will examine modernist literature in the context of contemporary art, psychology, and theories of everyday life to ask how this period understood ordinary objects and events. Could they be the proper subject matter of art? In the right circumstances, might they actually be art?
Writers may include Woolf, Joyce, Williams, Eliot, Stein, James, Freud, deCerteau. One previous literature class required.
Spr ENGL1710LS01 25139 TTh 9:00-10:20(01) (T. Katz)

ENGL 1760G. American and British Poetry Since 1945.
Fall ENGL1760GCS01 15586 M 3:00-5:30(15) (M. Blasing)

ENGL 1760U. American Modernism and its Aftermaths.
An interdisciplinary study of the rise of modernist aesthetic theory in the United States, its dissemination across various aesthetic (poetry, fiction, various plastic arts) and intellectual (economics, sociology, political theory) fields, and its persistence in United States intellectual life in the various permutations of postmodernism that have succeeded it. Authors to be considered include: poets such as Eliot, Williams, Bishop, Brooks, and Ashbery; novelists such as Faulkner, Hurston, O'Connor, and Didion; aesthetic theorists such as Greenberg, Rosenberg, Fried, Baraka and Kraus; and social theorists such as von Neuman, Rawls, Avish, Kahn, Samuelson, Drucker, and Friedman. Enrollment limited to 20.
Fall ENGL1760US01 25138 TTh 10:30-11:50(09) (D. Nabers)

ENGL 1761P. Yeats, Pound, Eliot.
Readings in the poetry and selected prose of Yeats, Pound, and Eliot. Enrollment limited to 20.
Fall ENGL1761PS01 15587 F 3:00-5:30(11) (M. Blasing)

ENGL 1761Q. W. G. Sebald and Some Interlocutors.
The works of W. G. Sebald have received a huge amount of critical attention since his death in 2001, particularly from critics interested in the question of the ethics of literature after Auschwitz. But what is Sebald's literary heritage, and who are his interlocutors? What internal and external connections do his works establish? Besides Sebald's works, readings will include Stendhal, Kafka, Walser, Borges, Bergson, Resnais, Lanzmann. Banner registrations after classes begin require instructor approval.
Enrollment limited to 20. Not open to first-year students.
Fall ENGL1761QCS01 15588 TTh 2:30-3:50(03) (T. Bewes)

ENGL 1762C. Image, Music, Text.
This course examines a number of novels and short stories alongside their various cinematic, theatrical, or musical adaptations in order to ask what a medium is and what distinctive formal features might define literature, cinema, theater, and music. Writers will include Melville, Conrad, Maupassant, Mann, and Cortazar; filmmakers will include Hitchcock, Antonioni, Godard, Visconti, and Coppola; critics will include Barthes, Deleuze, and Ranciere. Limited to 20 junior and senior concentrators in English, Comparative Literature, MCM, Hispanic Studies, Italian Studies, French Studies, German Studies, Literary Arts.
Fall ENGL1762CS01 16522 W 3:00-5:30(17) (S. Burrows)

ENGL 1780. Undergraduate Independent Study in Modern and Contemporary Literatures.
Tutorial instruction oriented toward a literary research topic. Section numbers vary by instructor. Instructor's permission required.

ENGL 1900Z. Neuroaesthetics and Reading.
Analysis of the theories of art, reading, and aesthetic experience proposed by neuroscience and cognitive science in light of traditional aesthetics and contemporary literary theory. Enrollment limited to 20. Prerequisite: At least one course on neuroscience or cognitive science and one 1000-level literature course. Instructor permission required.
Fall ENGL1900ZS01 15589 Th 4:00-6:30(04) (P. Armstrong)

ENGL 1901B. Politics and the Novel.
This course will explore how various realist and modernist novels represent political life, both in its practical dimensions and as forms of consciousness (ideologies, world views, attitudes). We will also explore theoretical and critical writings on the topic of literature and politics.
Authors will include Elizabeth Gaskell, E.M. Forster, Lionel Trilling, Ralph Ellison, Doris Lessing, and Viet Thanh Nguyen. Enrollment limited to 20.
Fall ENGL1901BS01 16521 W 3:00-5:30(17) (A. Anderson)

ENGL 1950G. Reading Narrative Theory.
Narrative is a powerful category of analysis spanning genres, historical periods, media forms, and the distinction between the "fictional" and the "real." This course examines major narrative theorists of the twentieth and twenty-first centuries. We will focus on literary examples, such as theories of the folk tale and novel, and scholarship that interrogates the work of narrative in historiography, in cinema and television, and in extra-literary contexts (in the struggle of political campaigners to "control the narrative" or debates on narrative in gaming, medical research, law, and theory itself). Limited to 20 senior English concentrators. Others admitted by instructor permission only.
Fall ENGL1950GCS01 16524 Th 4:00-6:30(04) (E. Rooney)

ENGL 1950H. The Recent Novel and its Cultural Rivals.
A careful consideration of several major late twentieth- and early twenty-first century anglophone novels in terms of their relationship to rival aesthetic forms and media—film, television, radio, video games, and the like. Writers to be considered include: Morrison, Lee, Rushdie, Smith, Didion, Diaz, Pynchon, and Egan. Enrollment limited to 20 senior English concentrators. Others admitted by instructor permission only.
Spr ENGL1950HS01 24492 Th 4:00-6:30(17) (D. Nabers)

ENGL 1991. Senior Honors Seminar in English.
Weekly seminar led by the Advisor of Honors in English. Introduces students to sustained literary-critical research and writing skills necessary to successful completion of the senior thesis. Particular attention to efficient ways of developing literary-critical projects, as well as evaluating, incorporating, and documenting secondary sources. Enrollment limited to English concentrators whose applications to the Honors in English program have been accepted. Permission should be obtained from the Honors Advisor in English. S/NC
Fall ENGL1991S01 15590 M 3:00-5:30(15) (J. Egan)

Independent research and writing under the direction of a faculty member. Permission should be obtained from the Honors Advisor in English. Open to senior English concentrators pursuing Honors in English. Instructor permission required.
Fall ENGL1992S01 15592 Arranged (J. Egan)
Spr ENGL1992S01 25490 Arranged (J. Egan)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGL 1993. Senior Honors Seminar in Nonfiction Writing.
This course is designed for students accepted into the Nonfiction Honors Program. It will be run in workshop format, and will focus on research skills and generative and developmental writing strategies for students embarking on their thesis projects. Weekly assignments will be directed toward helping students work through various stages in their writing processes. Students will be expected to respond thoughtfully and constructively in peer reviewing one another’s work. Open to seniors who have been admitted to the Honors Program in Nonfiction Writing. Instructor permission required.
Fall ENGL1993 S01 15600 F 3:00-5:30(11) (C. Imbriglio)
Independent research and writing under the direction of the student’s Nonfiction Writing honors supervisor. Permission should be obtained from the Honors Advisor for Nonfiction Writing. Open to senior English concentrators pursuing Honors in Nonfiction Writing. Instructor permission required.
Fall ENGL1994 S01 15602 Arranged (C. Imbriglio)
Spr ENGL1994 S01 25491 Arranged (C. Imbriglio)
ENGL 2210. Proseminar.
This seminar, required for first-year graduate students in English, considers the state and stakes of literary studies today. The course aims to familiarize students with contemporary critical debates and stances in the wider discipline, and to engage with current methodologies, theories, and analytical tensions. We also address issues of professionalization as they relate to the first years of graduate work. Enrollment limited to 10. S/NC.
Fall ENGL2210 S01 15557 F 10:00-12:30 (R. Reichman)
Spr ENGL2210 S01 24476 W 3:00-5:30(14) (S. Foley)
ENGL 2380. Graduate Independent Study in Medieval and Early Modern Literatures.
Section numbers vary by instructor. May be repeated for credit. Instructor’s permission required.
ENGL 2450. Exchange Scholar Program.
ENGL 2561J. Satire and irony.
Satire is not so much a genre as it is a mode of discourse, like irony, that resists formal constraints and can function in almost any kind of text. Satire’s dynamic contradictions (reform and frustration; laughter and anger; topicality and generality; purposefulness and pointlessness; public and private) enliven early modern texts, and complicate the relationship between language and meaning. Theories of satire provide a framework for the study of its history and practice. Emphasis falls on the great age of satire (especially the works of Jonathan Swift and his contemporaries) but some attention will be given to earlier and later examples.
Fall ENGL2561J S01 15565 W 3:00-5:30(17) (M. Rabb)
ENGL 2561Q. American Literature and Middle Class Labor.
A study of the representation of forms of middle class labor in American Fiction from the 1830s through the 1970s. Authors to be considered include Melville, Douglass, Jacobs, Twain, James, DuBois, Cather, Hurston, Fitzgerald, and Ellison. Enrollment limited to 15.
Fall ENGL2561Q S01 15566 M 3:00-5:30(15) (D. Nabers)
ENGL 2561R. Transcendental and Real in Nineteenth-Century British Fiction.
How “realist” was nineteenth-century fiction? This course looks at works where the values are transcendental rather than concrete, and the fate of those values: Dickens, Oliver Twist; Brontë, Wuthering Heights; Eliot, Middlemarch; Pater, Marius the Epicurean; James, The Sacred Fount, “The Real Thing,” and other short fiction; Conrad, Lord Jim and “The Secret Sharer.” These to be read alongside philosophical inquiry about the reality of values (Hegel, Marx, Nietzsche, Badiou) and novel theory accounts (Łukács, Moretti, Armstrong, Pavel). Enrollment limited to 15.
Spr ENGL2561R S01 24477 Th 4:00-6:30(17) (B. Parker)
Section numbers vary by instructor. May be repeated for credit. Instructor’s permission required.
ENGL 2760M. Postcoloniality and Globalism.
Seminar addresses intersections and disjunctions between two currents in contemporary literary and cultural criticism: “postcolonial theory” and “world literature theory.” We read “theory” alongside imaginative literature by writers and critics associated with concepts of postcoloniality, globalization, and diaspora. Themes include: race, identity and subject-position, and the problem of “literature” itself, understood as mode of thought and act of will. Readings will include: Césaire, Damrosch, Fanon, Hall, Jameson, Naipaul, Said, Soyinka, Spivak, Walcott, Wright, Wynter. Enrollment limited to 15.
Fall ENGL2760M S01 15567 Th 4:00-6:30(04) (O. George)
ENGL 2761F. The Racial Lives of Affect.
This course explores both dominant and emergent theoretical paradigms that anatomize the affective dimensions of racialized subjectivity in the US with a particular emphasis on recent scholarship that is linked with the field of affect theory. Rather than attempting an exhaustive or definitive mapping of that field, this seminar focuses on those thinkers whose works enhance our understandings of race. Enrollment limited to 15.
Spr ENGL2761F S01 24478 T 12:00-2:30 (D. Kim)
ENGL 2761M. Photographic Memory.
This class examines the relation between photography, memory, narrative, and indexicality. Readings range from classic studies of photography and film to more recent reflections on the role of the camera in a digital age, including the fiction of Ellison, Sebald, and James; the films of Antonioni, Kiarostami, and Bresson; the theoretical work of Bergson, Benjamin, Deleuze, Rancière, Mulvey, and Silverman. Enrollment limited to 15.
Spr ENGL2761M S01 24479 F 3:00-5:30(15) (S. Burrows)
ENGL 2780. Graduate Independent Study in Modern and Contemporary Literatures.
Section numbers vary by instructor. May be repeated for credit. Instructor’s permission required.
ENGL 2901G. Ultimate Dialogicality: Thinking With Bakhtin.
“[I]n Dostoevsky’s polyphonic novel we are dealing not with ordinary dialogic form … [b]ut with an ultimate dialogicality, … a dialogicality of the ultimate whole … ” With this claim, Bakhtin’s writing on literature arguably leaves the realm of criticism and becomes philosophy. In so doing it also anticipates some of the most challenging and significant developments in contemporary literature. Besides Bakhtin’s major works, readings include Deleuze, Rancière, Flusser, Woolf, Sebald, Kelman. Enrollment limited to 15.
Fall ENGL2901G S01 15568 F 3:00-5:30(11) (T. Bewes)
For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGL 2901H. Genres of Critique.
Debate about the nature and effects of reading resonates across the disciplines and beyond. It may be articulated with interests in formal questions of genre and style or philosophical traditions that draw upon Kantian, marxist or post-colonial canons. This course addresses three genres of critique: philosophical, ideological, and literary, addressing each in its engagements with problems of reading. We will interrogate the distinctiveness and incompatibilities of their discourses as well as their intersections and examine the question of genre itself, in literary avatars and as a trope for critique. Readings include Kant, Althusser, Spivak, Eliot, Gaskell. Enrollment limited to 15.
Spr ENGL2901H-S01 24480 M 3:00-5:30(13) (E. Rooney)

ENGL 2950. Seminar in Pedagogy and Composition Theory.
An experimental and exploratory investigation into writing as a preparation for teaching college-level writing. Reviews the history of writing about writing, from Plato to current discussions on composition theory. Against this background, examines various processes of reading and writing. Emphasizes the practice of writing, including syllabus design. Priority given to students in the English Ph.D. program. Undergraduates admitted only with permission of instructor.
Fall ENGL2950 S01 15603 T 12:00-2:30 (J. Readey)

ENGL 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall ENGL2970 S01 14973 Arranged 'To Be Arranged'
Spr ENGL2970 S01 24000 Arranged 'To Be Arranged'

ENGL 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall ENGL2990 S01 14974 Arranged 'To Be Arranged'
Spr ENGL2990 S01 24001 Arranged 'To Be Arranged'

ENGL XLIST. Courses of Interest to Students Concentrating in English.
Fall 2017
These courses, offered in other departments, are cross listed with the English Department and do not require advisor approval to count toward the concentration for English concentrators. Please refer to the primary department for registration details.
Cogut Center for Humanities
HMAN 2400B Trans/Passing, In Theory
Hispanic Studies
HISP 1240C Theater of Renaissance England and Spain
Spring 2018
These courses, offered in other departments, are cross listed with the English Department and do not require advisor approval to count toward the concentration for English concentrators. Please refer to the primary department for registration details.

Comparative Literature
COLT 0510P Reading the Renaissance

Environmental Studies

ENVS 0070C. Transcending Transportation Impacts.
Students will be engaged in interdisciplinary analyses of the life-cycle costs, environmental impacts, technical developments, and policy innovations at the local and regional level. We will discuss technical modifications in vehicles, such as plug-in hybrids, as well as policy and planning on intermodal systems, recycle-a-bike programs, intelligent transportation systems, and other innovations. Enrollment limited to 20 first year students. Instructor permission required.
FYS WRIT Fall ENVS0070C S01 15518 TTh 1:00-2:20(10) (K. Teichert)

This is an engaged scholars course that offers an introduction to contemporary environmental issues. We explore the relationships between human societies and the non-human environment through a survey of topical cases, including: human population growth and consumption, global climate change, toxins, waste streams, water resources, environmental justice and ethics, and agro-food systems. This course also analyzes various solutions—social, political, technical, and economic—put forth by institutions and individuals to address questions of environmental sustainability. Students must join a 90-minute weekly discussion section. Each section will partner with a community organization to complete an engaged, local project. WRIT
Fall ENVS0110 S01 15520 MWF 10:00-10:50(14) (D. King)

Introduces students to environmental science and the challenges we face in studying human impacts on an ever-changing earth system. We will explore what is known, and not known, about how ecosystems respond to perturbations. This understanding is crucial, because natural systems provide vital services (water and air filtration, climate stabilization, food supply, erosion and flood control) that can not be easily or inexpensively replicated. Special emphasis will be placed on climate, food and water supply, population growth, and energy.
Fall ENVS0490 S01 15523 TTh 10:30-11:50(13) (S. Porder)

ENVS 0495. Introduction to Environmental Social Science.
This course introduces students to core areas of theory and research in the environmental social sciences. It also challenges students to think carefully about what we learn and don’t learn when we apply different disciplinary lenses to interdisciplinary environmental challenges.
Spr ENVS0495 S01 24660 TTh 9:00-10:20(01) (S. Fricke)

ENVS 0705. Equity and the Environment: Movements, Scholarship, Solutions.
The environmental justice movement emerged in the U.S. South from the observation that African-Americans were more exposed to toxics than whites. It spurred decades of academic and activist efforts to understand and address the relationship between inequality and environment. The issue has expanded around the world, and beyond unequal exposures to “bads”, to unequal access to “goods,” along lines of equity by race, class, gender, ethnicity, indigenous identity, and position in the global economy. Issues of assigning responsibility and applying theories of justice with legal instruments have made environmental justice policy difficult. This course seeks to serve first-years and sophomores. DPLL
Spr ENVS0705 S01 22056 TTh 9:00-10:20(01) (J. Roberts)

From wood, water, and muscles, to coal, oil, and nuclear power, humans have a long history of reshaping their environments to access energy. The nature of these energy sources also influences the form and distribution of political and economic power. Using environmental history methods, this course examines the ties between energy, power, environmental change, and inequality, from before the agricultural revolution to the present.
Readings and lectures link the United States and Europe to the rest of the globe, with particular emphasis on the nineteenth and twentieth centuries. Each class combines lecture and discussion. No prerequisites. WRIT
Fall ENVS0710 S01 16554 TTh 2:30-3:50(03) (B. Demuth)

This course equips students with theoretical and empirical tools to analyze environmental issues from the perspective of economics. First, we review when and why the markets fail, compelling policy solutions (e.g., cap-and-trade), and cost-benefit analysis. Second, we survey methods to quantify the benefits of environmental regulations, including revealed and stated preference methods, a primer on climate-economy modeling, and a real-world application in a class research project. Third, we study the costs of environmental regulations. We conclude with advanced policy considerations (e.g., trans-boundary pollutants), private market solutions/ corporate social responsibility, and select special topics (e.g., resources and economic development).
Fall ENVS1350 S01 16727 TTh 10:30-11:50(13) (L. Barrage)
ENVS 1400. Sustainable Design in the Built Environment.
Provides students with an in-depth understanding of sustainability, as it relates to planning, engineering, architecture, landscape architecture and green buildings. Students conduct economic and environmental analyses to examine planning, design and building problems and opportunities holistically. Interdisciplinary teams work on applied design projects.
Fall ENVS1400 S01 15519 W 3:00-5:30(17) (K. Teichert)

ENVS 1490. SES-Independent Study/Science Writing.
The culmination of the Semester in Environmental Sciences at the Marine Biological Laboratory is an independent research project that builds on the topics covered in the aquatic and terrestrial ecosystem analysis core courses. In addition students participate in a seminar designed to help improve their ability to tell a lay reader about science. Enrollment is limited to students in this program. Instructor permission required.
Fall ENVS1490 S01 11150 Arranged "To Be Arranged"

ENVS 1491. SES-Terrestrial Ecosystem Analysis.
Team-taught course examining; the structure of terrestrial ecosystems fundamental biogeochemical processes, physiological ecology, impacts of environmental change on the landscape; the application of basic principles of ecosystem ecology to investigating contemporary environmental problems. Part of the Semester in Environmental Science at the Marine Biological Laboratory; enrollment is limited to students in this program. Instructor permission required.
Fall ENVS1491 S01 11151 Arranged "To Be Arranged"

ENVS 1492. SES-Aquatic Ecosystem Analysis.
Team-taught course examining the structure of freshwater, estuarine and marine ecosystems; impacts of environmental change on the landscape at local regional and global scales; the application of basic principles of ecosystem ecology to investigating contemporary environmental problems such as coastal eutrophication, fisheries exploitation. Part of the Semester in Environmental Science at the Marine Biological Laboratory; enrollment is limited to students in this program. Instructor permission required.
Fall ENVS1492 S01 11152 Arranged "To Be Arranged"

ENVS 1493. SES-Environmental Science Elective.
Two environmental science electives are offered each fall semester as part of the Semester in Environmental Science at the Marine Biological Laboratory, including: aquatic chemistry, mathematical modeling of ecological systems and microbial ecology. Enrollment is limited to students in this program. Instructor permission required.
Fall ENVS1493 S01 11153 Arranged "To Be Arranged"

ENVS 1555. Urban Agriculture: The Importance of Localized Food Systems.
This is an engaged scholar course. Urban agriculture has a critical function in a small but increasing movement toward more localized and sustainable food systems. This course focuses on research and readings from multiple disciplines addressing urban agriculture and local food systems’ role in shaping food policies, labor practices, sustainable agricultural practices, and human health (to name a few). More importantly, students will work with community partners to actively engage in a local food system project. Enrollment limited to 40. Instructor permission required. Email Prof. King to request override (Dawn_King@brown.edu).
Spr ENVS1555 S01 24661 TTh 1:00-2:20(10) (D. King)

ENVS 1575. Engaged Climate Policy at the UN Climate Change Talks.
Twelve undergraduate students will study a group of core readings, conduct independent and group projects, and attend the United Nations Framework Convention on Climate Change’s (UNFCCC) 23rd Conference of the Parties (COP23) and related climate change events in Bonn, Germany in November 2017. Students will critically analyze contemporary political events; develop and addresses pertinent research questions; engage with and interview experts in the field; craft policy-relevant and empirically grounded publications; and develop experience in using social media. Team-based research may be shared at the climate negotiations in Bonn. Contact J. Timmons Roberts for an application - j_timmons_roberts@brown.edu. WRIT
Fall ENVS1575 S01 16089 M 3:00-5:30(15) (J. Roberts)

This course investigates current environmental impacts and risks related to urban infrastructure systems. Students analyze efforts to minimize negative environmental, health and economic impacts of the built environment. The course explores urban initiatives to increase sustainability and resiliency of infrastructure systems in anticipation of increased risks related to climate change. The goal is to learn the rationale, process and technical aspects of the practice of environmental stewardship and resilience planning in an urban context. Students will develop competence in technical analysis, policy analysis, and program implementation through case studies and systems analyses.
Spr ENVS1580 S01 24470 TTh 10:30-11:50(09) (K. Teichert)

The diminishing quantity and quality of the resources of the Earth carries profound implications for the fulfillment of human rights and aspirations. But even as we understand better the intrinsic interdependencies between humans and the environment, policy gridlock persists. Indeed, the findings of fundamental environmental science are regularly contested on political grounds. The purpose of this course is to learn how to apply knowledge to map the relevant policy context in environmental issues, and to develop the tools and approaches to address any problem of decision in the environmental arena more creatively, effectively, and responsibly. Enrollment limited to 20. WRIT
Fall ENVS1615 S01 15521 M 3:00-5:30(15) (A. Lynch)

Scholars in many disciplines have begun using the term the Anthropocene to signal a geological epoch defined by human activity. This seminar examines the Anthropocene idea from the perspective of environmental history. What activities might have changed the planet – the use of fire thousands of years ago, or agriculture, or fossil fuels? Is the Anthropocene another term for climate change, or does it include pollution and extinction? Is it a useful concept? Drawing on anthropology and the sciences as well as history, we will use the Anthropocene to think through environmental change and the human relationship with the non-human world. WRIT
Spr ENVS1910 S01 24469 Th 4:00-6:30(17) (B. Demuth)

This course provides an introduction to a wide range of research approaches in the social and environmental sciences. We will cover the epistemological and theoretical foundations of various research approaches and discuss implications of these foundations for what research questions are answerable and what evidence one can bring to bear to answer such questions. By the end of the semester, students will be able to write a clear and answerable research question, and know what methods are appropriate to use to answer such a question. Enrollment limited to ENVS Juniors. ENVS seniors must receive instructor override from Professor VanWey. leah_vanwey@brown.edu. WRIT
Fall ENVS1920 S01 15531 TTh 1:00-2:20(10) (L. Vanwey)

From coal power to solar power, energy drives economies and increases quality of life world-wide. However, this same energy use can, and often does, lead to severe environmental destruction/pollution and global warming. This course serves as an introduction to energy policy in the United States and also explores global attempts to solve energy problems. This course examines different types of energy sources and uses, different ideological paths driving energy policy, the environmental impacts of energy use, current global and domestic attempts to solve energy problems, and the role of renewable and alternative forms of energy in future energy policy. WRIT
Spr ENVS1925 S01 24468 M 3:00-5:30(13) (D. King)

First semester of individual analysis of environmental issues, required for all environmental studies concentrators. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor override required prior to registration.
Second semester of individual analysis of environmental issues, required for all environmental studies concentrators. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor override required prior to registration.

ENVS 2450. Exchange Scholar Program.
ENVS 2980. Reading and Research.
First semester of thesis research during which a thesis proposal is prepared. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor override required prior to registration.

ENVS 2981. Reading and Research.
Second semester of thesis research. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor override required prior to registration.

ENVS 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

French Studies

FREN 0100. Basic French.
This is the first half of a two-semester course. Four meetings a week for oral practice. One hour of work outside of class is expected every day (grammar/writing, oral practice, reading). Enrollment limited to 18.

FREN 0200. Basic French.
This is the second half of a two-semester course. Four meetings a week for oral practice plus one conversation hour. One hour of work outside of class is expected every day (grammar/writing, oral practice, reading). An accelerated track enables qualified students to go directly to FREN 0500 after FREN 0200. Enrollment limited to 18.

FREN 0300. Intermediate French I.
A semi-intensive elementary review with emphasis on all four skills (listening, speaking, reading and writing). Class activities include drills, small group activities, and skits. Class materials include videos, a French film, short stories, and various other authentic documents. Prerequisite: FREN 0200 or placement (Previous experience with French is required to take this class). Four meetings per week, plus a 50-minute conversation section with TAs.

FREN 0400. Intermediate French II.
Continuation of FREN 0300 but may be taken separately. A four-skill language course that stresses oral interaction in class (three meetings per week plus one 50-minute conversation section). Materials include audio activities, film, and a novel. Short compositions with systematic grammar practice. Prerequisite: FREN 0300, FREN 0200 with permission, or placement.

FREN 0500. Writing and Speaking French I.
A four-skill language course that stresses oral interaction in class. Thematic units will focus on songs, poems, a short novel, a graphic novel, films and a longer novel. Activities include a creative project using Comic Life, and a systematic grammar review. Prerequisite: FREN 0400, FREN 0200 with written permission, or placement.

FREN 0600. Writing and Speaking French II.
Prerequisite for study in French-speaking countries. Continuation of FREN 500. Class time is devoted mainly to conversation and discussion practice. Writing instruction and assignments focus on essays, commentaries, and to a lesser degree, on story writing. Apart from reading assignments for discussion (press articles and literary excerpts), students select two novels to read. Prerequisite: FREN 0500 or placement. Enrollment limited to 18.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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**FREN 0720A. De l'Amour courtois au désir postmoderne.**
From twelfth-century courtly literature to contemporary film, this course explores the enduring romance between French culture and Eros. The ambiguities of desire are brought to the fore across changing religious and social contexts. Readings include Duras, Flaubert, Freud, and Baudrillard. Open to students who receive a 5 (AP test), 700 and above (SAT II) or with instructor’s permission. First Year Seminar, open to first year students only. Please email Virginia_Krause@brown.edu if you have questions. Taught in French. FYS WRIT

**FREN 0760A. Introduction à l'analyse littéraire.**
On what terms and with what tools can we "read" a literary text? An introduction to major genres (the short story, the novel, poetry, theater) of French and Francophone literature and to a range of analytical approaches to the text, including narrative theory, poetics and psychoanalysis. Readings will feature select 19th and 20th century works (Maupassant, Apollinaire, Ionesco, NDiaye) and excerpts from key analytic/theoretical writings (Benveniste, Todorov, Freud, Barthes, Bakhtin). Taught in French. WRIT

**FREN 1020A. Histoire de la langue française: usages, politiques et enjeux du français.**
A study of the evolution of the French language from the Middle Ages to the present. We will trace the main periods of this linguistic, social, historical and political development. Among topics to be explored: France’s encounter with English from the Norman conquest to the current so-called English “invasion,” the French Revolution’s destruction of dialects (patois), and the status of French in France’s former colonial empire. Through a variety of French and francophone texts we will investigate the transformations brought about by Feminists and by youth from the banlieues and examine the status of French outside of France. In French. Prerequisite: a course at the 600- or 700-level or equivalent proficiency. Contact the instructor to verify your proficiency if you have not taken French at Brown.

**FREN 1050F. Espace public; espace privé.**
This course will study the interpenetration of spaces in the 18th century, the domination of the public space but the emergence of the private. We will attempt to draw the frontiers of these spaces in a variety of texts. We will explore social spaces (the salon, the café), the domestic space (cabinet, bedroom), places of leisure and exteriority (gardens). Readings in Crébillon fils, Denon, Bastide, Diderot, Mme de Charrière, Rutilidge, Palissot.

**FREN 1110F. Le Roman contemporain.**
In this course we will read a selection of French and Francophone novels from 1985 to 2015. Authors include Patrick Modiano, Marie NDiaye, Lydie Salvayre, Marie Redonnet, Jean-Philippe Toussaint and Laurent Mauvignier. Placing these novels in dialogue with key voices from critical theory (Cixous, Barthes, Derrida, Kristeva), we will pursue through the semester a sustained reflection on major contemporary “problems” including identity, subjecthood, hospitality, history, genealogy, gender, memory and ghosts. Taught in French. Prerequisite: a course at the 0600- or 0700 -level or equivalent proficiency. Contact the instructor to verify your proficiency if you have not taken French at Brown.

**FREN 1150G. New Waves from Paris to Hollywood.**
"New wave" was coined by a journalist to refer to an “outburst” of filmmaking in France beginning in 1959. Never a movement, and short-lived in terms of whatever aesthetic uniformity it may have had, its effects spread across various European cinemas and became the emblem for a series of American filmmakers well into the 1970s. We will analyze work by a range of French and other cinéastes, in an attempt to understand what perhaps appears—from the current perspective—as one of the last gasps of “high cultural” productivity: the reality of corporate necessity and new forms of media. In English. Prerequisite: a course at the 0600- or 0700 -level or equivalent proficiency. Contact the instructor to verify your proficiency if you have not taken French at Brown.

**FREN 1310E. Paris, ville des Lumières.**
Representations of the city; the crowd; the rise of the individual; the narrator as spectator and promeneur; narratives of social mobility; speed and circulation; sex and the city; Paris as a cultural place. Various authors to be studied: Marivaux, Fougeret de Monbron, Rousseau, Diderot, Mercier, Restif de la Bretonne. Taught in French.

**FREN 1410I. Sorcellerie et Renaissance: le sort de la sorcière.**
An interdisciplinary exploration of witches and witchcraft in Renaissance France based on close analysis of primary texts-confessions from trials, iconography, literary texts, and witchcraft topic. Topics include the trial of Joan of Arc, the science of demons, skepticism, and the nature of belief. Readings in Montaigne, Mauss, among others. Enrollment limited to 20.

**FREN 1510A. Advanced Oral and Written French: Traduction.**
An introduction to the theory and practice of translation, this course will be designed to expand students’ range and appreciation of written styles and registers and will be based on translation exercises and texts reflecting different types of written and oral communication.Texts will range from literary texts (excerpts from novels, plays, comic books...) to journalistic texts (articles from newspapers...). Class activities will also include comparative studies of translated texts, as well as grammar review and vocabulary work. Course taught in French. Written translations to and from French. Prerequisite: FREN 0600 or equivalent. Enrollment limited to 18. Instructor permission required. WRIT

**FREN 1510C. Advanced Oral and Written French: A table!.**
Thematic units with different approaches to French cuisine and the French meal, such as regional cuisine, meals in literature and at the movies, radio-TV culinary shows, political and economical considerations, and, of course, a practical unit on how to compose, prepare and eat a French meal. Follows FREN 0600 in the sequence of language courses. Development of oral skills via presentations, debates, conversation, and discussion based on the various topics. Writing activities: essays, translations, commentaries, journals, creative descriptions and stories, etc. Taught in French. Pre-requisites include FREN 0600 and FREN 0610 and FREN 0620. WRIT

**FREN 1510H. A nous deux la mode.**
A bird’s eye view of the fashion world, we will explore the birth and evolution of the French fashion industry (from the development of department stores to the birth and rise of Haute Couture), its impact on society and social change, as well as its relationship with art and advertisement. Materials range from literary excerpts to journalistic texts, online resources, and films, and will include portraits of fashion designers, studies of iconic fashion pieces, descriptions of techniques and crafts, and analyses of fashion shows. Activities include presentations, discussion, essays, commentaries, and the creation of a trend book. Taught in French. WRIT
FREN 1610C. Advanced Written French: Atelier d'écriture.
An advanced course in (functional or creative) writing. The workshops range from practice in interpersonal communication (letters) to essays and various forms of narration. Recommended to students returning from a study-abroad program, students with a native French background who lack formal training in writing, or post-FREN 1510 students. Exercises for each workshop plus a final writing project. Prerequisite: FREN 1510. Enrollment limited to 15. Instructor permission required. Taught in French. WRIT Spr FREN1610C S01 24634 MWF 11:00-11:50(04) (V. Kervenncic)

FREN 1900H. La France en guerre.
Studies the rise of far-right tendencies (nationalism, anti-Semitism, legitimism, racism), beginning with the Franco-Prussian war and its aftermath, and examining key moments up to the present day. Topics include the Dreyfus Affair, the Vichy regime, the Front national. Taught in French. Prerequisite: a course at the 0600- or 0700-level or equivalent proficiency. Contact the instructor to verify your proficiency if you have not taken French at Brown. WRIT Spr FREN1900H S01 24645 F 3:00-5:30(15) (G. Schultz)

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Instructor permission required.

Independent study in an area of special interest to the student, with close guidance of a member of the staff, and leading to a major paper. Required of candidates for honors, and recommended for all senior concentrators. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

FREN 2130H. Au-delà de l'Europe: La France et le monde au XVIIe siècle.
In the 17th century, contact with the Middle East, India, the Far East, North and South America, and the Caribbean profoundly changed the ways the French understood themselves and their place in the world. We will study 17th-century depictions of the non-Western world in travel narratives, early ethnographic writing, drama, and fiction, including representations of religious difference, race, slavery, gender, and Orientalism. Readings: Bernier, Champlain, Choisy, Le Code noir, Gaillard, Marie de l'Incarnation, Les Milieu et une nuit, Molère, Montaigne, Racine, the Relations des Jésuites de la Nouvelle-France, Scudéry, Tavernier. Theoretical readings by Anderson, Chakrabarty, Glissant, Said, i.a. In French. Fall FREN2130H S01 15800 F 3:00-5:30(11) (L. Seifert)

FREN 2150E. Théories et fictions des Lumières.
This course seeks to examine the idea of "Lumières" in Eighteenth-century France through the reading of some of the major authors of the period. Focusing on the relationship between theory and fiction we will analyze the concepts central to the French Enlightenment: happiness, progress and freedom as they are formulated both in fiction (novels and plays) and in theoretical texts. Readings will include major texts by Montesquieu, Voltaire, Diderot, Rousseau, as well as other writers and philosophers. Conducted in French. Prerequisite: a course at the 0600- or 0700-level or equivalent proficiency. Contact the instructor to verify your proficiency if you have not taken French at Brown. Spr FREN2150E S02 24643 M 3:00-5:30(13) (O. Mostefai)

FREN 2450. Exchange Scholar Program.
Fall FREN2450 S01 14977 Arranged "To Be Arranged" Spr FREN2450 S01 24004 Arranged "To Be Arranged"

FREN 2600K. Politique et fiction en Afrique.
This seminar investigates the political aesthetics of fiction in Francophone Africa with a special focus on our post-millennial period. We will examine new and established writers, filmmakers, and theorists as they rework conventions of postcolonial satirical and protest fiction and address contemporary problems of globalization, corruption, and social violence. How does current Francophone African fiction speak to contemporary political theory, and in what ways does this fiction address and constitute a politics of genre? And how does African fiction use politics to mediate its complicated relationship to theories of world literature? Taught in French. Fall FREN2600K S01 15801 M 3:00-5:30(15) (J. Izzo)

FREN 2600L. Au croisement des événements (de mai 68).
Nearly 50 years ago France was living through the "events" of May '68, a "revolution" that was not only cultural and political but at the same time artistic and intellectual. We will try—by analyzing a series of texts—first to understand the stakes of movements such as Situationism, Structuralism and Tel Quel, and second, to examine the relevance of those groups and their ideas in the very different context of the present time. Texts by Debord, Barthes, Sollers, Derricka, Deleuze, Foucault and others. Taught in French.
Spr FREN2600L S01 24637 W 3:00-5:30(14) (D. Willis)

FREN 2970. Preliminary Examination Preparation.
For graduate students who have completed their course work and are preparing for a preliminary examination.
Fall FREN2970 S01 14978 Arranged "To Be Arranged" Spr FREN2970 S01 24005 Arranged "To Be Arranged"

FREN 2980. Reading and Research.
Work with individual students in connection with special readings, problems of research, or preparation of theses. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

FREN 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall FREN2990 S01 14979 Arranged "To Be Arranged" Spr FREN2990 S01 24006 Arranged "To Be Arranged"

FREN XLIST. Courses of Interest to French Concentrators.

Gender and Sexuality Studies

GNSS 0120. Introduction to Gender and Sexuality Studies.
Explores the interdisciplinary fields of Gender and Sexuality Studies, considering the relation between formations of gender and those of sexuality across a range of historical and disciplinary contexts. Considers how both sexuality and gender are shaped in relation to race and ethnicity, economic inequality, and the postcolonial legacy. WRIT Spr GNSS0120 S01 25443 MWF 1:00-1:50(06) (D. Walker)

This seminar examines problems that arise in marriage from the failures of couples to speak to each other, and when they do, from their failures to speak openly, honestly, and from a position of social equality. We examine from a metaphysical and moral perspective the agency in men and women as it is reflected in what couples say and think. We look at whether marriages fail when women consciously choose or unconsciously fall into oppressive, subordinate postures and examine whether men take advantage of these postures. Class materials will be primarily novels and films, supplemented with philosophical, sociological, and legal essays. Fall GNSS1711 S01 16736 M 3:00-5:30(15) (F. Foa)

GNSS 1721. Cinema's Bodies.
The course explores the cinematic construction of bodies – female, male, animal, and other. Cinematic bodies do not stand alone as they are framed, cut, exposed, veiled, enlarged, distorted, and gendered. The body is screened and composed into an image of beauty, of death, of sex, of work. Cinematic devices like the close-up, camera angle, light are transform bodies into the body of the film and its specific style. This leads to the question of the spectator’s body as a screen for the filmic body and to the theoretical explorations of the embodied visions cinema entails and stimulates. DPLL Fall GNSS1721 S01 15253 T 4:00-6:30(09) (G. Koch)

GNSS 1810. Independent Study and Research.
Independent reading and research for upper-level students under the direction of a faculty member. Please check Banner for the correct section number and CRN to use when registering for this course.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
GNSS 1990. Independent Study and Research.
Independent reading and research for upper-level students under the direction of a faculty member. Please check Banner for the correct section number and CRN to use when registering for this course.

Independent research under the direction of a faculty member, leading to a thesis. Required of honors candidates. Open to seniors only. Instructor permission required.

Independent research under the direction of a faculty member, leading to a thesis. Required of honors candidates. Open to seniors only. Instructor permission required.

GNSS 1990. Senior Seminar.
A research seminar focusing on the research and writing of the participants. Required of senior concentrators; open to other advanced students by permission. WRIT
Fall GNSS1990 S01 16737 W 3:00-5:30(17) (D. Walker)

Gender and Sexuality Studies is by its very nature transdisciplinary. Can we speak of a single methodology that ties GNSS together? How might scholars work on gender and/or sexuality while respecting disciplinary boundaries and training? We will start with the premise that studies in gender and sexuality are tied together by critique that questions foundational assumptions and takes account of its own position within a given field of knowledge. By studying canonical theoretical texts alongside disciplinary studies characterized by a feminist and/or queer focus, we will investigate how critique operates and how standards of evidence are marshaled in particular disciplines.
Fall GNSS2000 S01 16739 T 3:00-5:30(09) (D. Davis)

An advanced research seminar in feminist theory and gender studies. The seminar’s focus for 2017-18 is "The Cultures of Pacifism." Presentations made by Brown faculty, Pembroke Center fellows, visiting scholars, and students. Offered in conjunction with the Pembroke Seminar. Enrollment limited to 8.
Fall GNSS2010K S01 16758 W 10:00-12:30 (L. Gandhi)

An advanced research seminar in feminist theory and gender studies. The seminar’s focus for 2017-18 is "The Cultures of Pacifism." Presentations made by Brown faculty, Pembroke Center fellows, visiting scholars, and students. Offered in conjunction with the Pembroke Seminar. Enrollment limited to 8.
Spr GNSS2020K S01 25521 W 10:00-12:30 (L. Gandhi)

GNSS XLIST. Courses of Interest to Concentrators in Gender and Sexuality Studies.

Geological Sciences

One semester is required for seniors in Sc.B. and honors program. Course work includes preparation of a thesis. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Enrollment is restricted to undergraduates only.

GEOL 2450. Exchange Scholar Program.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall GEOL2450 S01 19480 Arranged "To Be Arranged"
Spr GEOL2450 S01 24007 Arranged "To Be Arranged"

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Enrollment is restricted to graduate students only.

GEOL 2990. Thesis Preparation.
For graduate students who have met the tuition requirements and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall GEOL2990 S01 14981 Arranged "To Be Arranged"
Spr GEOL2990 S01 24008 Arranged "To Be Arranged"

German Studies

Independent study on a particular topic related to German culture. In German or English. At the discretion of the instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

GRMN 1990. Senior Conference.
Special work or preparation of an honors thesis under the direction of a faculty member. Please check Banner for the correct section number and CRN to use when registering for this course.

GRMN 2450. Exchange Scholar Program.
Fall GRMN2450 S01 14984 Arranged "To Be Arranged"
Spr GRMN2450 S01 24011 Arranged "To Be Arranged"

GRMN 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the Registration Fee to continue active enrollment while preparing for a preliminary examination.
Fall GRMN2970 S01 14985 Arranged "To Be Arranged"
Spr GRMN2970 S01 24012 Arranged "To Be Arranged"

GRMN 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

GRMN 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the Registration Fee to continue active enrollment while preparing a thesis.
Fall GRMN2990 S01 14986 Arranged "To Be Arranged"
Spr GRMN2990 S01 24013 Arranged "To Be Arranged"

GRMN XLIST. Courses of Interest to Students Concentrating in German Studies.

Hispanic Studies

HISP 0100. Basic Spanish.
This fast-paced beginning course provides a solid foundation in the development of communicative skills in Spanish (speaking, listening comprehension, reading and writing) as well as some insight on the cultures of the Spanish-speaking world. Individual work outside of class prepares students for in-class activities focused on authentic communication. Placement: students who have never taken Spanish before, or have scored below 390 in SAT II, or below 240 in the Brown Placement Exam. Students who have taken Spanish before and those with an AP score of 3 or below must take the Brown Placement Exam. Students should check Placement and Course Description in the Undergraduate Program section of the Hispanic Studies Website. Enrollment limited to 18; 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized.
Fall HISP0100 S01 15490 MW 9:00-9:50(08) (S. Sobral)
Fall HISP0100 S01 15490 TTh 9:00-10:20(08) (S. Sobral)
Fall HISP0100 S02 15491 MW 10:00-10:50(13) (S. Sobral)
Fall HISP0100 S02 15491 TTh 10:30-11:50(13) (S. Sobral)
Fall HISP0100 S03 15492 MW 1:00-1:50(10) (S. Sobral)
Fall HISP0100 S03 15492 TTh 1:00-2:20(10) (S. Sobral)
Fall HISP0100 S04 15493 TTh 1:00-2:20(10) (S. Sobral)
Fall HISP0100 S04 15493 MW 2:00-2:50(10) (S. Sobral)
HISP 0110. Intensive Basic Spanish.
A highly-intensive, two-semester sequence in one semester that carries 10 contact hours per week. Primarily for students with knowledge of Spanish, who have scored below 450 on SATII or below 340 in Brown Placement Exam. Students with little or no preparation in Spanish should consult with the Course Supervisor. Focused on acquisition of communicative skills (speaking, listening comprehension, reading and writing), and development of cultural awareness. With successful completion of the course students will be able to understand simple texts, carry on short spontaneous conversations involving everyday topics (such as modern daily life, health, art and culture, nature and the environment, and relationships) and write simple texts with good command of grammar and sentence structure. Ideal for students interested in fast-tracking their language learning to meet study abroad requirements. Double credit. Instructor permission required. Enrollment limited to 18; 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized.
Fall HISP0110 S01 15494 MTWThF 9:00-10:50 (N. Schuhmacher)

HISP 0200. Basic Spanish.
A continuation of HISP 0100. This course continues to focus on acquisition of communicative skills (speaking, listening comprehension, reading and writing) as well as cultural awareness. With successful completion of the course students will be able to understand simple texts, carry on short spontaneous conversations involving everyday topics (such as modern day life and its pressures, health, art and culture, nature and the environment, relationships) and write simple texts with good command of grammar and sentence structure. Prerequisite: HISP 0100 or placement: SAT II scores between 400 and 450; Brown Placement Exam scores between 241 and 340. Students with an AP score of 3 or below must take the Brown Placement Exam. Students should check Placement and Course Description in the Undergraduate Program section of the Hispanic Studies Website. Enrollment limited to 18; 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized.
Spr HISP0200 S01 24388 MW 9:00-9:50(01) (S. Sobral)
Spr HISP0200 S02 24389 Th 9:00-10:20(01) (S. Sobral)
Spr HISP0200 S02 24389 MW 10:00-10:50(09) (S. Sobral)
Spr HISP0200 S03 24390 Th 10:30-11:50(09) (S. Sobral)
Spr HISP0200 S03 24390 MW 1:00-2:20(10) (S. Sobral)
Spr HISP0200 S04 24391 Th 1:00-2:20(10) (S. Sobral)
Spr HISP0200 S04 24391 MW 2:00-2:50(10) (S. Sobral)

HISP 0300. Intermediate Spanish I.
This course continues to develop and strengthen students’ proficiency in the Spanish language, as well as to help them increase their cultural understanding. It seeks to develop both fluency and accuracy and to teach students to express, interpret, and negotiate meaning in context. Through the exploration of themes such as the individual and the community, health issues, traveling, multiculturalism and human rights, students focus on communication and learn to appreciate cultural differences. Pre-requisite: either HISP 0200, HISP 0110, or placement: SAT II scores between 460 and 510, or Brown Placement Exam scores between 341 and 410. Students with an AP score of 3 or below must take the Brown Placement Exam. Students should check Placement and Course Description in the Undergraduate Program section of the Hispanic Studies Website. Enrollment limited to 18; 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized.
Fall HISP0300 S01 15495 MW 9:00-9:50(08) (V. Smith)
Fall HISP0300 S01 15495 Th 9:00-10:20(08) (V. Smith)
Fall HISP0300 S02 15496 MW 10:00-10:50(13) (V. Smith)
Fall HISP0300 S02 15496 Th 10:30-11:50(13) (V. Smith)
Fall HISP0300 S03 15497 MW 12:00-12:50(10) (V. Smith)
Fall HISP0300 S03 15497 Th 1:00-2:20(10) (V. Smith)
Fall HISP0300 S04 15498 MW 1:00-1:50(10) (V. Smith)
Fall HISP0300 S04 15498 Th 1:00-2:20(10) (V. Smith)
Spr HISP0300 S01 24395 MW 10:00-10:50(09) (V. Smith)
Spr HISP0300 S01 24395 Th 10:30-11:50(09) (V. Smith)

HISP 0400. Intermediate Spanish II.
This course offers an exploration of the Spanish language and Hispanic cultures through a variety of thematic foci: the world of work, the arts, globalization and technology, leisure, and celebrations. It focuses on vocabulary building, the examination of some of the more difficult points of grammar, and moving students towards a more sophisticated level of comprehension and expression. Students work with readings, including literary texts; songs; film; and the visual arts. Prerequisite: HISP 0300 or placement: SAT II scores between 520 and 590 or Brown Placement Exam scores between 411 and 490. Students with an AP score of 3 or below must take the Brown Placement Exam. Students should check Placement and Course Description in the Undergraduate Program section of the Hispanic Studies Website. Enrollment limited to 18; 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized.
Fall HISP0400 S01 15499 MW 10:00-10:50(13) (V. Smith)
Fall HISP0400 S01 15499 Th 10:30-11:50(13) (V. Smith)
Spr HISP0400 S01 24396 MW 9:00-9:50(01) (V. Smith)
Spr HISP0400 S01 24396 Th 9:00-10:20(01) (V. Smith)
Spr HISP0400 S02 24397 MW 10:00-10:50(09) (V. Smith)
Spr HISP0400 S02 24397 Th 10:30-11:50(09) (V. Smith)
Spr HISP0400 S03 24398 MW 12:00-12:50(10) (V. Smith)
Spr HISP0400 S03 24398 Th 1:00-2:20(10) (V. Smith)
Spr HISP0400 S04 24399 MW 1:00-1:50(10) (V. Smith)
Spr HISP0400 S04 24399 Th 1:00-2:20(10) (V. Smith)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HISP 0490A. Spanish for Health Care Workers.  
This course is designed to provide students with the linguistic and cultural competencies necessary to communicate with and help treat Spanish speaking patients with limited English. The course includes a general review of pertinent grammar and vocabulary relating to the health care professions, assessment, and vocabulary useful for establishing patient rapport. Students will practice communicating in common medical situations, conducting patient interviews, and increase their understanding of possible responses from patients. We will broaden knowledge of different cultures, explore health care systems/ professions in a variety of settings, and have pertinent speakers invited to class. Please note this course does not qualify as a pre-requisite for study abroad or for HISP 0600. Students who complete 0490A successfully can continue in our program with HISP 0500 as the next level.

Fall
Spr HISP0490A S01 15500 MWF 11:00-11:50(16) 'To Be Arranged'
Spr HISP0490A S01 24400 MWF 1:00-1:50(06) 'To Be Arranged'

HISP 0500. Advanced Spanish I.  
Offers comprehensive work in listening, speaking, reading, and writing, with targeted grammar review. Students work with a variety of readings (literature, newspaper articles, etc.) and with art forms such as music and film, in order to develop oral and written expression and to explore issues relevant to the Hispanic world. Students explore topics of their own interest through student-led activities and presentations. Prerequisite: HISP0400 or placement: SAT II scores between 600 and 660, Brown Placement Exam scores between 491 and 570, or AP score of 4 in language or literature. Please check Hispanic Studies website (Undergraduate Programs) for course descriptions and placement information. Enrollment limited to 18; 15 spaces are available for students during pre-registration. 3 spaces will be available at the start of the semester for incoming or re-admitted students who should attend the first class. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized.

Fall
Spr HISP0500 S01 15501 MW 9:00-9:50(08) (N. Schuhmacher)
Fall HISP0500 S01 15501 TTh 9:00-10:20(08) (N. Schuhmacher)
Fall HISP0500 S02 15502 MW 10:00-10:50(13) (N. Schuhmacher)
Fall HISP0500 S02 15502 TTh 10:30-11:30(13) (N. Schuhmacher)
Fall HISP0500 S03 15503 MW 2:00-2:50(03) (N. Schuhmacher)
Fall HISP0500 S03 15503 TTh 2:30-3:50(03) (N. Schuhmacher)
Fall HISP0500 S04 15504 MW 1:00-1:50(10) (N. Schuhmacher)
Fall HISP0500 S04 15504 TTh 1:00-2:20(10) (N. Schuhmacher)
Spr HISP0500 S01 24401 MW 9:00-9:50(01) (N. Schuhmacher)
Spr HISP0500 S01 24401 TTh 9:00-10:20(01) (N. Schuhmacher)
Spr HISP0500 S02 24402 MW 10:00-10:50(09) (N. Schuhmacher)
Spr HISP0500 S02 24402 TTh 10:30-11:30(09) (N. Schuhmacher)
Spr HISP0500 S03 24403 MW 2:00-2:50(11) (N. Schuhmacher)
Spr HISP0500 S03 24403 TTh 2:30-3:50(11) (N. Schuhmacher)

HISP 0600. Advanced Spanish II.  
Offers continued, advanced-level work in speaking, listening, reading, and writing skills, with focused review of challenging aspects of Spanish grammar. Course materials include films, music, art works, and a variety of written texts (articles, stories, plays, a novella, etc.) chosen to promote class discussion and in-depth written analysis. There will be individual and group activities, including in-class presentations and creative writing projects. Prerequisite: HISP0500 or placement: SAT II scores between 670 and 740, Brown Placement Exam scores between 571 and 650, or AP score of 5 in language. Please check Hispanic Studies website (Undergraduate Programs) for course descriptions and placement information. Enrollment limited to 18. Pre-enrolled students must attend the first four days of class to maintain their pre-registered status and notify the instructor in advance if they must miss any day before the 4th class when the composition of the course section is finalized. Students with scores of 750 and above on the SAT II, 551 on the Brown Placement Exam, or 5 in AP Literature should consider offerings in the HISP 0730-0740-0750 range.

Fall
Spr HISP0600 S01 15505 MWF 11:00-11:50(16) (E. Gomez Garcia)
Fall HISP0600 S02 15506 MWF 12:00-12:50(12) (E. Gomez Garcia)
Fall HISP0600 S03 15507 MWF 1:00-1:50(06) (E. Gomez Garcia)
Fall HISP0600 S04 15508 MWF 2:00-2:50(07) (E. Gomez Garcia)
Fall HISP0600 S05 15509 MWF 12:00-12:50(12) (E. Gomez Garcia)
Spr HISP0600 S01 24404 MWF 1:00-1:50(06) (E. Gomez Garcia)
Spr HISP0600 S02 24405 MWF 10:00-10:50(03) (E. Gomez Garcia)
Spr HISP0600 S03 24406 MWF 11:00-11:50(04) (E. Gomez Garcia)
Spr HISP0600 S04 24407 MWF 12:00-12:50(05) (E. Gomez Garcia)
Spr HISP0600 S05 24408 MWF 1:00-1:50(06) (E. Gomez Garcia)

HISP 0710C. Introducción a la lingüística hispánica.  
This course introduces students to the study of language and deepens their knowledge of Spanish in its main linguistic components. After briefly considering the nature of language, we will study the sounds of Spanish (phonology and phonetics), word and sentence structure (morphology and syntax), and the elements and mechanics to express and interpret meaning (semantics and pragmatics). We will then turn our focus to linguistic phenomena such as changes in Spanish over time (historical linguistics), variations in the language according to region and social group (sociolinguistics), and bilingualism, with special attention to Spanish in the U.S.

Spr HISP0710C S01 24411 TTh 1:00-2:20(10) (S. Sobral)

HISP 0730. Encounters: Latin America in its Literature and Culture.  
An introduction to major authors, movements, and themes of Spanish American literature from the Discovery to the present. This course also aims to develop students’ oral and written expression in Spanish. Students are expected to engage in close reading and discussion of texts, as well as to revise their papers. Prerequisite: HISP 0600, or AP score =5, or SAT II (Literature) score of 750 or above, or Brown placement score of 651 or above. WRIT DPLL

Fall HISP0730 S01 15803 TTh 9:00-10:20(08) (F. Martinez-Pinzon)

HISP 0740. Intensive Survey of Spanish Literature.  
An introduction to the major authors and literary movements of Spanish literature from the Middle Ages to contemporary times. Focuses on building critical vocabulary. Also aims to develop students’ written and oral expression in Spanish. Preparatory course for 1000-level courses for students who achieve the highest placement in Spanish. Prerequisite: HISP 0600, or AP score =5, or SAT II (Literature) score of 750 or above, or Brown placement score of 651 or above. WRIT

Fall HISP0740 S01 15513 MW 1:00-1:50(06) 'To Be Arranged'

HISP 0750B. The Latin American Diaspora in the US.  
Designed to bridge academic learning about Hispanic/Latino culture and volunteer work in agencies serving Hispanics in Providence. Readings, films, and guest presentations focus on issues of concern to these groups. Spanish language learning occurs in the classroom and the community, where students have the opportunity to enrich and test course content. Prerequisite: HISP 0600 or placement: SAT II scores of over 750, 5 in AP Literature or 651 and over in the Brown Placement Exam.

Spr HISP0750B S01 24409 MW 9:00-9:50(02) 'To Be Arranged'
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Instructor(s)</th>
<th>Credits</th>
<th>Schedule</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISP 0750E</td>
<td>Topics in Hispanic Culture and Civilization.</td>
<td>M. Vaquero</td>
<td>4</td>
<td>TTh</td>
<td>Brown Placement</td>
</tr>
<tr>
<td>HISP 0750G</td>
<td>Wildeyed Stories.</td>
<td>M. Vaquero</td>
<td>4</td>
<td>TTh</td>
<td>Brown Placement</td>
</tr>
<tr>
<td>HISP 0750P</td>
<td>Transatlantic Crossings: Readings in Hispanic Literatures.</td>
<td>S. Thomas</td>
<td>4</td>
<td>MWF</td>
<td>Brown Placement</td>
</tr>
<tr>
<td>HISP 1240O</td>
<td>Theater of Renaissance England and Spain.</td>
<td>F. Martinez-Pinzon</td>
<td>4</td>
<td>MWF</td>
<td>Brown Placement</td>
</tr>
<tr>
<td>HISP 1290G</td>
<td>Generación del '98.</td>
<td>F. Martinez-Pinzon</td>
<td>4</td>
<td>MWF</td>
<td>Brown Placement</td>
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</tbody>
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**HISP 0750E. Topics in Hispanic Culture and Civilization.**
This course provides an overview of the culture and history of Spain from medieval times to the present, drawing from literature, art, music, and film. We will study Islamic al-Andalus, Judeo-Spanish culture (including the Sephardic diaspora), Christian Spain, the conquest and colonization of the "New World," the decline of empire, the Civil War and its aftermath, Historical and cultural connections between Spain and Europe, and Spain and America will also be examined. Taught in Spanish. Prerequisite: HISP 0600 or placement. SAT II scores of over 750, 5 in AP Literature or 551 and over in the Brown Placement Exam.

**HISP 0750G. Wildeyed Stories.**
Students will study a wide-range of stories from cultures of the Spanish-speaking world in literature and film: tales, fables, and humorous stories of heroism, deception and revenge. Class discussions will seek to situate the works examined within the political and cultural currents and debates of their time. Emphasis will be placed on both the historical context and on the development of close reading skills. Conducted in Spanish. Prerequisite: HISP 0600 or placement: SAT II scores of over 750, 5 in AP Literature or 551 and over in the Brown Placement Exam.

**HISP 0750P. Contemporary Social Justice Cinema of the Spanish-Speaking World.**
This course engages students with social justice issues in the Spanish-speaking world (the US, Latin America, and Spain) from multiple perspectives. It analyzes recent films addressing topics including: racial, gender, and sexual identities; socioeconomic (in)equity; immigration, the border, and displacement; civil conflict, dictatorship, and their aftermath; the environment and climate change; postcolonial legacies and the impact of neoliberalism and globalization. We will analyze the stories these films tell and how they tell them, asking whether film can be considered an activist project, and what effect it might have on legal, political, and social debates outside the walls of the cinema.

**HISP 1240O. Theater of Renaissance England and Spain.**
Protestant England and Catholic Spain were political rivals for much of the sixteenth and seventeenth centuries. Yet for all their differences, the two countries developed remarkably similar theatrical cultures. Both gave rise to the first commercial playhouses. Plays in both combined popular and learned traditions, and audiences came from diverse sectors of society, raising the concern of moralists convinced of the theater’s pernicious effects. This seminar will juxtapose English and Spanish plays with similar themes—e.g., class conflict, gender identity, nationhood—by Shakespeare, Lope de Vega, and others to explore the commonalities and highlight the particularities of these two theatrical traditions. Taught in English.

**HISP 1290G. Generación del '98.**
To what extent does a national crisis, the Spanish defeat of 1898 by the United States, provoke a movement of patriotic revaluation, the so-called "Generación del '98"? Or are the symptoms of crisis more in accord with fin de siècle aesthetics, which incites literary experimentation in all the traditional genres? These crucial questions will be studied in such typical authors as Unamuno, Baroja, Azorín, Antonio Machado, and Ramón del Valle-Inclán.

**HISP 1290U. The Spanish Civil War in Visual Culture.**
No other event marked contemporary Spain as profoundly as the Spanish Civil War (1936-39). This course will study the history of the war itself and trace the multiple ways it has been remembered and represented from its immediate aftermath through to the present. Materials will include films and documentaries, paintings and photography, propaganda posters and newsreels, radio and television, monuments and comics, oral histories and fiction. In addition, we will read critical and theoretical texts on historical trauma and individual and collective memory as well as amnesia. This course will be conducted in Spanish.

**HISP 1330E. Rediscovering New Worlds: The Conquest of the Americas in Contemporary Literature and Film.**
This course explores the link between truth and falsehood, history, and fiction, in a broad range of works on the Conquest. We draw from witnesses like Columbus, Cabeza de Vaca, Carvajal, and Lefy to interpret novels like Carpentier's El arpa y la sombra, Posse's El largo atardecer del caminante, and Saer's El entenado, as well as films like Herzog's Aguirre, Joffé's The Mission, and Dreamwork's The Road to Eldorado.

**HISP 1330Q. Short Forms: Major Works in a Minor Key.**
This course will explore short masterworks by major Latin American writers of the twentieth century and beyond (Borges, Onetti, Cortázar, García Márquez, Bolaño, Aíra, Zamba and others) alongside some of their major influences (e.g. Poe, Conrad Doyle, Hemingway, Faulkner), with side-trips into the work of contemporary writers on whom they leave their own imprint. Readings will primarily involve short stories, but will also include novellas, poems, films, visual art, and music. Reading in Spanish, with discussion in English.

**HISP 1330T. El amor en español.**
This course will visit a series of famous, colorful and controversial couples (novios, esposos y amantes) from the literature and history of Spain and Latin America. We will consider such themes as courtly love, erotic love, commonplaces about love and distortions of them, the degradation of idealized love, and the renunciation of human love in favor of divine love in the medieval and Renaissance periods. We will also address contemporary rites of passage in the formation of couples, traditional and modern views of love and marriage, as well as the "death of the couple," love and melancholy, melodrama and hysteria.

**HISP 1330Z. Tropical Fictions: Geography and Literature in Latin American Culture.**
Tropical nature in Latin America has been represented in conflicting ways: a place of leisure and sensuality, but also of depravity and sloth; a place of infinite riches but also a space where disease and racial degeneration thrive. Tracing the variations and endurance of these tropes in 18th- to 21st-century Western consciousness, this course aims to re-think the tropics in literature, film and the arts from a vantage point different to that of temperate-climate European civilization. Readings include canonical fictions such as La vorágine (1924), 19th-century European travelogues from the region, as well as contemporary indigenous art.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**HISP 1370A. "One Hundred Years of Solitude": Culture and Politics in Garcia Marquez's Work.**

This course will focus on Garcia Márquez's masterpiece in order to analyze its modes of representation, discursive strategies, and fictional construction as well as its interactions with history, politics, and literary and popular traditions. Other related work by the Colombian Nobel Prize winner will be discussed, as will his journalistic pieces and movies. The novel may be read in Spanish or English; discussion will be mainly in Spanish.

Fall  HISP1370A S01  16349  MWF  2:00-2:50(07)  "To Be Arranged"

**HISP 1370E. La creatividad en América Latina.**

Varias teorías actuales sobre la creatividad se ilustran muy bien con relatos, poemas, películas, música y arte de América Latina gracias a su adaptación de materiales, diversidad de formas, y gusto por la mezcla. Revisaremos las poéticas del dadaísmo, el surrealismo, la literatura fantástica, el realismo mágico, la biografía imaginaria, el utopismo, y el juego verbal. La clase será visitada por algunos autores para discutir sus procesos creativos.

Spr  HISP1370E S01  25065  W  3:00-5:30(14)  "To Be Arranged"

**HISP 1371A. Lorca, Vallejo, Neruda.**

This course delves into the work of three towering figures of modern poetry in Spanish: Spain’s Federico García Lorca, Perú’s César Vallejo, and Chile’s Pablo Neruda. We will explore their evolution from avant-garde experiment to increasing political commitment, paying particular attention to questions of gender, indigeneity, and modernity, seeing how each poet strives to entwine aesthetics with politics without sacrificing an extraordinary lyricism. Our readings will include side-trips into their prose, theater, and visual art, and into experiments in poetry, performance, and politics by some of their contemporaries (and ours).

Fall  HISP1371A S01  15867  M  3:00-5:30(15)  (M. Clayton)

**HISP 1500L. Theory and Practice of Translation.**

The objectives of the course are to give students a firm grounding in the theory of translation studies as well as extensive experience in the practice of literary translation, working closely with several canonical Spanish texts as well as texts of the student’s choice. Throughout the course of the semester, students will also be called upon to reflect actively on their experience as translators, and dialogue on this experience with their peers. Pre-requisite: HISP 0600 or equivalent. WRIT

Spr  HISP1500L S01  25327  F  3:00-5:30(15)  (S. Thomas)

**HISP 1980. Independent Study.**

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

**HISP 1990. Senior Thesis Preparation.**

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

**HISP 2030B. History and Fiction: Literature of the 15th Century.**

The goal of this course is to familiarize students with major literary works of the Fifteenth Century, and their socio-cultural background. Major works of three outstanding poets of this period (Juan de Mena, Íñigo López de Mendoza, and Jorge Manrique), satirical and historical writings, romances, (ballads sung with instrumental accompaniment), Alfonso Martínez de Toledo’s Corbacho and Fernando de Rojas’ Celestina will be presented in the context of the distinct cultural traditions that coexisted in Spain.

Spr  HISP2030B S01  24416  M  3:00-5:30(13)  (M. Vaquero)

**HISP 2160Q. Stage and Page in Early Modern Spain: A Seminar on the Comedia Nueva.**

This seminar studies the development and florescence of early modern Spain’s most popular form of entertainment, the comedia nueva, from both literary and performance perspectives. We will read works by the principal playwrights of the period (Lope de Vega, Tirso de Molina, Calderón de la Barca, and others); examine the comedias’s main sub-genres (honour plays, comedias de capa y espada, and autos sacramentales, etc.); and consider the institutional regulation and social and material dimensions of theatrical activity (including the configuration of playhouses and composition of acting companies). Key critical approaches to the comedia, past and present, will also be explored.

Fall  HISP2160Q S01  24664  F  3:00-5:30(15)  (L. Bass)

**HISP 2250B. Galdós and the Nineteenth-Century Spanish Literary Field.**

Literary history knows Benito Pérez Galdás as the initiator of the modern Spanish novel. Through analysis of Galdós’s theoretical and literary texts, will explore this claim in relation to the preceding stage of the novel, to the author's relationship with contemporary writers, and to his own work in other genres, to assess his contribution to the evolution of the figure of the writer, and of the Spanish literary field.

Fall  HISP2250B S01  15716  T  4:00-6:30(09)  "To Be Arranged"

**HISP 2350E. Novela latinamericana contemporánea.**

Estudiaremos la constelación de novelas fundamentales (Pedro Páramo, Los ríos profundos, Rayuela, La muerte de Artemio Cruz, Cien Años de soledad entre otras) que configuran un sistema literario hecho de innovación formal, ampliación de la lectura, y puesta en crisis de la representación.

Fall  HISP2350E S01  15514  Th  4:00-6:30(04)  (J. Ortega)

**HISP 2350V. The Politics of Romanticism in Spanish American Literature.**

This course postulates Romanticism as a regime of representation employed by second-generation citizens of the new Latin American republics to organize time-space in post-Independence Spanish America. Through readings of national romances, periodicals, poetry, cuadros de costumbres and travelogues, we will discuss what Romanticism and being Romantic meant for mid-19th-century writers and readers in Spanish America. Weekly readings will be organized around a word from a glossary of Romantic keywords: lengua, pueblo, indio, España, among others. Finally, the course will examine connections between 19th-century Romanticism, 20th century criollismo and Populism.

Spr  HISP2350V S01  24663  Th  4:00-6:30(17)  (F. Martinez-Pinzon)

**HISP 2450. Exchange Scholar Program.**

**HISP 2520L. Latin American Existential Literature.**

European existentialism had a strong impact on Latin American literature, though that impact remains under-explored. The course begins with European existentialism and Latin American identity politics. It then explores the particular constructions of European existentialism effected by Argentine, Uruguayan, Mexican, and Brazilian writers of prose fiction in the mid-twentieth century. Readings in Spanish and English. Instructor override needed for registration.

Fall  HISP2520L S01  15515  F  3:00-5:30(11)  (S. Merrim)

**HISP 2620A. Entre nosotros: Representing the Family in Modern and Contemporary Spain.**

This course reflects on the representation of the family in Spanish literature and film since the Civil War, spanning texts and films from the period 1942-2009. Some of the themes we will explore over the course of the semester include: the family as a space for the formation of identities and subjectivities; the symbolic relationship between family and nation; religion; gender roles and the concepts of maternity, fatherhood, and childhood; monstrous families and the specter of incest; modern “found” families constructed outside biological bonds. Texts and films by Sender, Bueno Vallejo, Delibes, Cela, Latorre, Buñuel, Borau, Almodóvar, Saura, among others.

Fall  HISP2620A S01  15853  W  3:00-5:30(17)  (S. Thomas)
### Course Descriptions

**HISP 2970. Preliminary Examination Preparation.**
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

- Fall HISP2970 S01 14991 Arranged "To Be Arranged"
- Spr HISP2970 S01 24017 Arranged "To Be Arranged"

**HISP 2980. Research in Spanish and Latin American Literature.**
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

**HISP 2990. Thesis Preparation.**
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

- Fall HISP2990 S01 14992 Arranged "To Be Arranged"
- Spr HISP2990 S01 24018 Arranged "To Be Arranged"

**HISP 2991. Thesis Preparation.**
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

**HISP XLIST. Courses of Interest to Concentrators in Hispanic Studies.**

**History**

**HIST 0150A. History of Capitalism.**
Capitalism didn’t just spring from the brain of Adam Smith. Its logic is not encoded on human DNA, and its practices are not the inevitable outcome of supply and demand. So how did capitalism become the dominant economic system of the modern world? History can provide an answer by exploring the interaction of culture and politics, technology and enterprise, and opportunity and exploitation from the era of the Atlantic Slave Trade to the 2008 Financial Crisis. HIST 0150 courses introduce students to methods of historical analysis, interpretation, and argument. This class presumes no economics background, nor previous history courses.

- Fall HIST0150A S01 15265 MWF 10:00-10:50(14) (S. Rockman)

**HIST 0150H. Foods and Drugs in History.**
What we consume connects us to the worlds of both nature and culture. Bodily and socially, "you are what you eat," but if your well-being suffers, you often seek out other ingestible substances. In many times and places, changing what you eat is thought to be healing, while in other times and places drugs -- either remedial or recreational -- are thought to be distinct and more immediately restorative. Few human interactions with the larger world are more important or interesting than how comestibles and medicines have been discovered, mixed, transformed, distributed, and how those processes have changed us.

- Fall HIST0150H S01 16486 TTh 9:00-10:20(08) (H. Cook)

**HIST 0202. African Experiences of Empire.**
This is a "flipped" course on sub-Saharan Africa from the mid-nineteenth through the mid-twentieth centuries. It presupposes no knowledge of Africa and serves as an introduction to the continent. It focuses on daily life, families, and popular culture. Students will analyze change, question perspectives, and imagine life, and question what "Africa" was during the period of European imperialism. Most readings are primary sources, which include photographs, songs, and oral histories. The course is "flipped"; students' first introduction to the content comes before class meetings through the text and multi-media sources. Class meetings are dedicated to discussion and exercises, including role-playing.

- Fall HIST0202 S01 15377 MWF 11:00-11:50(16) (N. Jacobs)

**HIST 0233. Colonial Latin America.**
Colonial Latin America, from Columbus's voyage in 1492 to Independence in the nineteenth century, was the creation of three peoples: Europeans, Native Americans, and Africans. Spanish and Portuguese conquerors brought with them the world of the Crusades, the Inquisition, and the Renaissance. Native Americans lived there already, in rich empires and hunter-gatherer bands. Africans came as slaves from Senegal, Nigeria, Congo and Angola, bringing old traditions and creating new ones. These diverse peoples blended together to form a new people. This was a place of violence, slavery and oppression -- but also of art, faith, new societies, new ideas.

- P WRIT Fall HIST0233 S01 15262 MWF 10:00-10:50(14) (R. Cope)

**HIST 0244. Understanding the Middle East: 1800s to the Present.**
This course is an introduction to the history of the modern Middle East from the mid-19th C to the present. Readings and topics are structured chronologically, and emphasize the key events and turning points in the political and economic history of the region. The goal of the course is to understand how the Middle East, as it is today, has been shaped by the events of the past.

- Fall HIST0244 S01 16539 MW 3:00-4:20(17) (S. Mitter)

**HIST 0250. American Exceptionalism: The History of an Idea.**
For four centuries, the theme of America having a special place in the world has dominated American politics and culture, though many have questioned or challenged American distinctiveness. This course examines articulations and critiques of American exceptionalism, using sources from American history and literature, from comparative history and literature, and from modern American culture and politics. It is intended both as an introduction to American history and as a thematic class, focused on the U.S. in a global context, which is different from a traditional high school or first-year college American history class.

- WRIT Fall HIST0250 S01 15267 MWF 12:00-12:50(12) (M. Vorenberg)

**HIST 0270A. From Fire Wielders to Empire Builders: Human Impact on the Global Environment before 1492.**
This is a new lecture course intended to introduce the field of environmental history to students with no previous experience in it. The study of prehistoric, ancient and medieval environments is a heavily interdisciplinary research field, and the course will emphasize the variety of sources available for studying it. We will combine textbook readings with primary source readings from scientific and archaeological reports and, especially, contemporary texts.

- P Fall HIST0270A S01 15269 MWF 1:00-1:50(06) (B. Lander)

**HIST 0522O. The Enlightenment.**
The Enlightenment: Introduction to the Enlightenment as a fragmented series of projects that aimed at human liberation and the understanding of the social and natural worlds, with massive implications for the way that we conceive of ourselves today. Readings explore philosophy, science, slavery, economics, gender relations, and politics in the 18th century.

- FYS WRIT Fall HIST0522O S01 15561 Th 4:00-6:30(04) (J. Revill)

**HIST 0523B. State Surveillance in History.**
How and why do states watch their citizens? This course explores historical practices of state surveillance from the perspective of both the "watchers" and the "watched." Special emphasis will be given to twentieth-century Europe, but examples from other parts of the world and the US will also be featured in the readings. Some of the readings will be primary sources: memoirs, diaries, surveillance files. Other sources will include films and short fiction and some scholarly pieces on the workings of state security and secret police organizations.

- FYS WRIT Fall HIST0523B S01 16713 TTh 2:30-3:50(03) (H. Case)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIST 0555B. Robber Barons.
Today, the United States looks a lot like it did at the turn of the 20th century. Much like it is now, America’s economy at that time saw tremendous growth interrupted by periodic financial crises. Moreover, both are periods of immense inequality. Whereas we have the one percent, the late 19th century witnessed a small group of capitalists amass unprecedented fortunes, which provided immense political power. In this class, we will explore what the lives of these “robber barons” can tell us about the role of economic privilege in shaping America’s social, cultural, and political history. FYS WRIT DPLL
Fall HIST0555B S01 15292 Th 4:00-6:30(04) (L. Rieppel)

HIST 0556A. Sport in American History.
This course covers the relationship of sports to aspects of American culture since 1900. Topics include gender, race, amateurism, professionalism, intercollegiate athletics, and sports heroes. Enrollment limited to 20 first year students. FYS WRIT
Fall HIST0556A S01 15273 TTh 9:00-10:20(08) (H. Chuadacoff)

HIST 0559B. Asian Americans and Third World Solidarity.
As historian Vijay Prashad puts it, “The Third World was not a place. It was a project.” During the 20th century struggles against colonialism, the peoples of Africa, Asia, and Latin America believed that another world was possible. Here, too, in the United States, minorities and their allies dreamed of dignity, democracy, and justice. Looking through the experiences of Asian Americans, this course examines the domestic freedom movements in the context of global decolonization. Topics include: campus activism, immigration, capitalist labor regimes, neo-colonialism, cultural hegemony, and Afro-Asian connections. FYS DPLL
Fall HIST0559B S01 15289 F 3:00-5:30(11) (N. Shibasawa)

HIST 0580M. The Age of Revolutions, 1760-1824.
In the middle of the eighteenth century, the Americas belonged to a handful of European monarchies; within a few decades, most of the Americas was composed of independent republics, some of the European monarchs were either deposed or quaking on their thrones. Usually considered separately, revolutions in British North America, France, Saint-Domingue (Haiti) and Spain had diverse local circumstances yet composed a single cycle of intellectual ferment, imperial reform, accelerating violence and, forging of new political communities. We will examine revolutions that helped create the world we live in. Enrollment limited to 20 first year students. FYS WRIT P
Fall HIST0580M S01 15283 M 3:00-5:30(15) (J. Mumford)

HIST 0637A. History of Jews in Brazil.
This sophomore seminar studies the history of Jews in Brazil from early colonial rule to the present. We first focus on the role of Jews and New Christians in the economic development of the Portuguese colony. We then examine the presence of the Inquisition, North African immigration in the nineteenth century, the larger Eastern European immigration in the twentieth century, and the formation of communities and institutions over the course of the last hundred years. Finally, we consider the role of Jewish opposition to the military regime and in the consolidation of democracy in the late twentieth century. DPLL
Fall HIST0637A S01 15285 W 3:00-5:30(17) (J. Green)

HIST 0654A. Welfare States and a History of Modern Life.
History of the American welfare state, from its origins in nineteenth-century industrial capitalism to contemporary debates about health care, in comparative perspective. Why did welfare states appear and what form did the U.S. version take? Considerations of social inequality, labor relations, race, gender, family policy, the social wage, and the relationship between markets and the state are all considered. Some comparison with European models. SOPH WRIT
Fall HIST0654A S01 15294 Th 4:00-6:30(04) (R. Self)

HIST 0930P. Powering the Past (ENVS 0710).
Interested students must register for ENVS 0710.
Fall HIST0930P S01 16808 Arranged 'To Be Arranged'

Interested students must register for EDUC 0610.
Fall HIST0940F S01 16395 Arranged 'To Be Arranged'

HIST 0940K. Israel’s Wars (JUDS 0050H).
Interested students must register for JUDS 0050H.
Fall HIST0940K S01 16824 Arranged 'To Be Arranged'

HIST 1080. Humanitarianism and Conflict in Africa.
This course focuses on the major issues and debates concerning humanitarianism and international intervention in 20th century Africa. It will explore the history of humanitarianism and the many challenges that arise when governments and institutions intervene in a conflict. Then students will investigate specific sites of conflict in Africa (ranging from Nigeria, Somalia, Rwanda, Sudan, and Western Sahara) and analyze different models of intervention and aid. These case studies will expose students to pivot in African history and equip them with a critical vocabulary with which to assess contemporary conflicts.
Fall HIST1080 S01 16090 TTh 1:00-2:20(10) (J. Johnson)

An exploration of how the artifacts of visual, material, aural and ritual culture illuminate the practices and beliefs of people at various levels of Chinese society from the late imperial period to the present. Topics include arrangements of space and time, popular entertainment, religion and performance, the growth of mass media, and the relationship of cultural forms to politics, protest and global forces. In addition to lectures, discussions and papers, students will have the opportunity to create research presentations using multiple media formats. DPLL
Spr HIST1122 S01 25158 TTh 1:00-2:20(10) (R. Nedostup)

HIST 1149. Imperial Japan.
This course is for students interested in exploring the changing ideas, technologies and practices that shaped Japan’s history from the 1850s, when it confronted the power of an encroaching West, to the 1930s when its choices led the nation to the edge of ruin. Lectures and readings will address the collapse of the Tokugawa regime, the Meiji Restoration, the construction of empire, and the emergence of new forms of cultural and political expression. Students will also learn how ideas about gender, race, and tradition were understood and made use of in Imperial Japan. Open to all students. WRIT
Fall HIST1149 S01 15595 MWF 11:00-11:50(16) (K. Smith)

HIST 1200C. History of Greece: From Alexander the Great to the Roman Conquest.
Covers the decline of Athens as the center of classical civilization; the conquests of Alexander the Great; the culture of the Greek elite and, to the extent that it’s recoverable, of the indigenous populations of the Hellenistic world; and Greek contributions to what we call Western Civilization. P WRIT
Fall HIST1200C S01 15278 TTh 1:00-2:20(10) (K. Sacks)

HIST 1230B. Modern European Intellectual and Cultural History: The Fin de Siecle, 1880-1914.
A sequel to HIST 1230A focusing on radical intellectual and cultural currents that challenged and destabilized the assumptions of Victorian high culture during the fin de siecle. Through a careful reading of primary texts by Hobhouse, Nietzsche, Weber, and Freud. The course explores issues such as the rise of mass consumer culture, neoliberal and neofascist politics, philosophic irrationalism, psychoanalysis, and the woman question. WRIT
Fall HIST1230B S01 15266 MWF 12:00-12:50(12) (M. Gluck)

HIST 1240A. Politics of Violence in 20C Europe.
Europe’s 20th century saw the emergence of forms of violence unthinkable in a world without mass politics. To better understand the changes in European states and societies that gave rise to total war and the violence associated with totalizing ideologies such as fascism and communism, we will read Lenin, Mussolini, Hitler, Fanon and others who sought to interpret violence as an extension of ideology. We will also read selections from more recent works by state leaders, historians and cultural figures from Ukraine to France, from Turkey to Great Britain who have reinterpreted past violence for present political ends.
Fall HIST1240A S01 15275 TTh 10:30-11:50(13) (H. Case)
HIST 1262M. Truth on Trial: Justice in Italy, 1400-1800.
Why do we think that one human being can judge another? How did this activity, enshrined in legal and political systems, profoundly shape society? We'll examine the changing face of justice, from the medieval ordeal to judicial torture; expansion of inquisitorial and state law courts; and the eventual disunionment with the use of torture and the death penalty in the eighteenth century. Using Italy as focus, the course explores how law courts defined social, political, scientific, and religious truth in Italy. Students may pursue a project on another geographical area for their final project for the course. WRIT P
Fall HIST1262M S01 15339 TTh 10:30-11:50(13) (C. Castiglione)

HIST 1266C. English History, 1529-1660.
Examines politics, religion, and society from the Protestant Reformation to the Puritan Revolution—a period of rapid and dramatic change when the world, for most English people, was turned upside down. Considers the experiences and concerns of ordinary men and women, as well as the elite. Takes in Scotland, Ireland, and the great migration to New England. P WRIT
Fall HIST1266C S01 15270 MWF 2:00-2:50(07) (T. Harris)

HIST 1310. History of Brazil.
This course charts the history of Brazil from Portuguese contact with the indigenous population in 1500 to the present. It examines the country’s political, economic, social, intellectual, and cultural development to understand the causes, interactions, and consequences of conflict, change, and continuity within Brazilian society. WRIT
Fall HIST1310 S01 15276 TTh 10:30-11:50(13) (J. Green)

HIST 1333. The Mexican Revolution.
An in-depth study of the Mexican Revolution. The focus is on the years of revolutionary violence (1910-1920), but considerable attention is also paid to the roots of the Revolution and to its socioeconomic and political impact in the period 1920-1940.
Fall HIST1333 S01 15279 TTh 1:00-2:20(10) (E. Hu-Dehart)

HIST 1370. The United States and Brazil: Tangled Relations.
This course provides an introduction to cinematic interpretations of Latin American history. Together we will explore how (and why) filmmakers have used motion pictures to tell particular narratives about the Latin American past. We will critically examine a broad range of films dealing with historical questions, and explore what these films have to say about how gender and sexuality, imperialism, slavery, the church, revolution and repression shaped the history of the region. In order to explore these topics we will examine films in relation to academic, autobiographical, and popular texts, all of which provide different ways of representing the past.
Fall HIST1381 S01 15280 TTh 2:30-3:50(03) (D. Rodriguez)

HIST 1505. Making America Modern.
This course surveys a crucial period in American history between the end of Reconstruction and the beginning of World War I. During this time, the United States transitioned from a relatively fragmented, traditional, and largely agricultural society into one that was remarkably diverse, increasingly urban, and highly industrialized. In surveying this important transitional period, we will pay particular attention to far-reaching changes in the nation’s business and economic life, its social movements, as well as its cultural developments, all with an eye to understanding how the United States became one of the world’s most commanding economic, political, and cultural powers. DPLL WRIT
Fall HIST1505 S01 15268 MWF 1:00-1:50(06) (L. Rieppel)

A survey with a specialized focus exploring American history from an urban frame of reference. Topics include the social consequences of the modern city, politics, reform, and federal-city relations. WRIT
Fall HIST1551 S01 15261 MW 8:30-9:50(01) (H. Chudacoff)

HIST 1553. Empires in America to 1890.
This course surveys the development of American foreign relations from initial encounters between Native Americans and newly arrived Europeans to the extension of EuroAmerican power beyond the continental United States. By being attentive to a wider global context, we will attempt to understand the trajectory of “America” from a colonial hinterland to dominant world power. DPLL WRIT
Fall HIST1553 S01 15271 MWF 2:00-2:50(07) (N. Shibusawa)

HIST 1930L. The History of American Education (EDUC 1020).
Interested students must register for EDUC 1020.
Fall HIST1930L S01 16394 Arranged 'To Be Arranged'

HIST 1930Q. History of the State of Israel: 1948 to the Present (JUDS 1711).
Interested students must register for JUDS 1711.
Spr HIST1930Q S01 25529 Arranged 'To Be Arranged'

HIST 1930W. Introduction to Yiddish Culture (JUDS 1713).
Interested students must register for JUDS 1713.
Fall HIST1930W S01 16825 Arranged 'To Be Arranged'

HIST 1931F. History of Greece from Archaic Times to the Death of Alexander (CLAS 1210).
Interested students must register for CLAS 1210.
Fall HIST1931F S01 16823 Arranged 'To Be Arranged'

HIST 1931G. Roman Religion (CLAS 1410).
Interested students must register for CLAS 1410.
Fall HIST1931G S01 16814 Arranged 'To Be Arranged'

This course explores the major debates in the history of medicine in Africa during the nineteenth and twentieth centuries and highlights the coexistence of a variety of healing traditions and medical understandings across the continent. It will focus on the following questions: What are some of the ways Africans practice and understand medicine? How have these practices interacted with other medical systems? What impact did colonialism have on the production of medical knowledge? How were practices and treatments evaluated and deemed effective? By whom and on what grounds? And how have independent African states addressed these critical issues?
Fall HIST1960Q S01 15286 W 3:00-5:30(17) (J. Johnson)

Typically, the Democratic Peoples Republic of Korea (DPRK) is portrayed as a rogue nation ruled by the Kim family, autocrats who are either “mad” or “bad” and whose policies have traumatized the country’s citizens, wrecked the economy, and threatened nuclear disaster on South Korea, East Asia, even the USA. This course moves beyond such stereotypes to examine the interconnected political, economic, and cultural transformations of the DPRK from 1945 to the present. Also included are the lived experiences of the Korean people, the plight of refugees, and the question of unification with South Korea. WRIT
Fall HIST1961L S01 16800 W 3:00-5:30(17) (J. McClain)

HIST 1962D. The Social Lives of Dead Bodies in China and Beyond.
Corpses, much like the living, are not neutral bodies, but are managed into structures of social meaning. This course aims to uncover corpses as signifiers and actors during times of community upheaval. We will take modern China as our focal point, but also look elsewhere in the Americas, Europe, Africa and Asia since the 19th century, when the broadening scale and nature of warfare; state expansion; rapid urban and rural development; global circulations of technology; and the interplay of international philanthropies with older forms of charity and ritual pacification significantly affected the treatment, conceptions, and actions of the dead. DPLL WRIT
Fall HIST1962D S01 16540 Th 4:00-6:30(04) (R. Nedostup)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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<th>Days</th>
<th>Location</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1964A</td>
<td>Age of Impostors: Fraud, Identification, and the Self in Early Modern Europe.</td>
<td>(F. Ahmed)</td>
<td>1</td>
<td>15287</td>
<td>W</td>
<td>Spr</td>
<td></td>
</tr>
<tr>
<td>HIST 1964F</td>
<td>Early Modern Ireland.</td>
<td>(R. Cope)</td>
<td>1</td>
<td>15329</td>
<td>M</td>
<td>Fall</td>
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</tr>
<tr>
<td>HIST 1965R</td>
<td>The Monarch in Modern Britain: Constitution and Celebrity.</td>
<td>(K. Pant)</td>
<td>1</td>
<td>15560</td>
<td>W</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>HIST 1966Q</td>
<td>Colonial Encounters and the Creation of Latin America.</td>
<td>(R. Cope)</td>
<td>1</td>
<td>15284</td>
<td>M</td>
<td>Fall</td>
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<tr>
<td>HIST 1968A</td>
<td>Approaches to the Middle East.</td>
<td>(B. Doumani)</td>
<td>1</td>
<td>15287</td>
<td>W</td>
<td>Spr</td>
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<tr>
<td>HIST 1968K</td>
<td>The Ottomans: Faith, Law, Empire.</td>
<td>(T. Nummedal)</td>
<td>1</td>
<td>30000</td>
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<tr>
<td>HIST 1969A</td>
<td>Israel-Palestine: Lands and Peoples I.</td>
<td>(O. Bartov)</td>
<td>1</td>
<td>30000</td>
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<tr>
<td>HIST 1972H</td>
<td>U.S. Human Rights in a Global Age.</td>
<td>(M. Vorenberg)</td>
<td>1</td>
<td>15284</td>
<td>M</td>
<td>Fall</td>
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</tr>
<tr>
<td>HIST 1977B</td>
<td>Feathery Things: An Avian Introduction to Animal Studies.</td>
<td>(R. Cope)</td>
<td>1</td>
<td>15284</td>
<td>M</td>
<td>Fall</td>
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</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIST 1992. History Honors Workshop for Prospective Thesis Writers. Prospective honors students are encouraged to enroll in HIST 1992 during semesters 5 or 6. HIST 1992 offers a consideration of historical methodology and techniques of writing and research with the goal of preparing to write a senior thesis in history. The course helps students refine research skills, define a project, and prepare a thesis prospectus, which is required for admission to honors. Students who complete honors may count HIST 1992 as a concentration requirement. Limited to juniors who qualify for the honors program. WRIT

Fall HIST1992 S01 15331 M 3:00-5:30(15) "To Be Arranged"

HIST 2890. Preliminary Examination Preparation. For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall HIST2890 S01 14993 Arranged "To Be Arranged"
Spr HIST2890 S01 24019 Arranged "To Be Arranged"

HIST 2910. Reading and Research. Section numbers vary by instructor. Please see check Banner for the correct section number and CRN to use when registering for this course.

HIST 2930. Colloquium. Required of all first-year graduate students; includes participation in Thursday Lecture Series. E

Fall HIST2930 S01 15850 Th 4:00-6:30(04) (K. Sacks)

HIST 2935. Historical Crossings: Empires and Modernity. "Historical crossings" is a rough translation of histoire croisée, referring to global configurations of events and a shared history, rather than to a traditional comparative historical. This Seminar is designed to be the cornerstone of the M.A. program. It will not serve as a traditional historical methods course but instead focus on training students to read and think on various scales of historical analysis—from cross-cultural and trans-geographic to the granularity of social and cultural specificity, requiring students to think both globally and locally and introducing them to an advanced level of historical inquiry, debate, and exploration.

Fall HIST2935 S01 15866 T 9:30-12:00 (J. Mumford)

HIST 2940. Writing Workshop. Required of all 3rd semester Ph.D. students.

Fall HIST2940 S01 15851 Th 4:00-6:30(04) (K. Smith)

HIST 2970E. Early Modern Continental Europe - Reading. This course is designed to introduce graduate students to some major topics and debates in early modern European history, as well as a range of geographical, methodological, and historiographical perspectives. Readings combine recent works and classics to give a sense both of where the field has been and where it is going. Topics covered include political history, religious interactions (among Christians and between Christians, Jews and Muslims), urban history, the history of the book, Atlantic history, the history of science, and the Enlightenment. The class also provides the opportunity to explore a single topic of choice in greater depth.

Fall HIST2970E S01 15848 W 3:00-5:30(17) (H. Cook)

HIST 2971J. Topics in 19th c. U.S. History. This state-of-the-field course will introduce students to nineteenth-century U.S. history, with specific attention to how recent transnational, imperial, institutional, and cultural approaches have reframed older debates over the "Age of Jackson," "Manifest Destiny," and the "Market Revolution." This seminar offers core readings for students preparing a comprehensive exam field, while providing others with content knowledge to teach this period of American history.

Fall HIST2971J S01 15888 F 1:00-3:30 (S. Rockman)

HIST 2971V. 19th and 20th Century European History. This is a graduate field seminar designed to introduce students to the historiography and recent scholarship of 19th and 20th century Europe. The primary goal of the seminar is to help students prepare for preliminary examinations in modern European history and to provide the essential conceptual tools for further research in the field. Each week will focus on a large theme or set of debates, which will be explored through in-depth explorations of assigned texts as well as recommended readings.

Fall HIST2971V S01 15849 W 3:00-5:30(17) (M. Gluck)

HIST 29790. Thesis Preparation. For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

Fall HIST2990 S01 14996 Arranged "To Be Arranged"
Spr HIST2990 S01 24021 Arranged "To Be Arranged"

HIAA 0002. Advanced Design Studio. These studios, three of which are required for graduation, are offered by individual instructors to students who have successfully completed the core curriculum. They are assigned by lottery on the first day of classes. Once assigned to an advanced studio, a student may not drop studio.

Fall HIAA0002 S01 15314 MTh 1:10-6:10 "To Be Arranged"

HIAA 0003. Architectural Projection. This course introduces the beginning student to the origins, media, geometries and role(s) of projection drawing in the design and construction process. The student will learn systems of projection drawing from direct experience, and be challenged to work both from life and to life. Subjects such as transparency, figure/ground, sciagraphy, oblique projection, surface development, volumetric intersections, spatial manipulation and analytic operations will build on the basics of orthographic and conic projection. The course involves line and tone drawing, hand drafting, computer drawing(Autocad) and computer modeling(Rhino).

Fall HIAA0003 S01 15315 T 1:10-6:10 "To Be Arranged"

HIAA 0021. Arts of Asia. From sacrificial cauldrons to sunflower seeds, and Roman Buddhas to five-toed dragons, this course introduces the incredible diversity of traditions that collectively constitute the arts of Asia. Organized around a series of case studies of exemplary objects, the course explores the temporal, geographic, material, and thematic range of Asian art through the life stories of individual things. Tracing histories of human ingenuity and value, we will examine the ways these things changed the people who saw them and we're themselves changed in the process of being seen. And we will come to know them through the ways they change us.

Fall HIAA0021 S01 15308 TTh 9:00-10:20(08) (J. Moser)
HIAA 0075. Introduction to the History of Art: Modern Photography.
This class will survey the history of photography as an art form and means of visual communication in the modern era. The photograph will be considered from both aesthetic and social perspectives; photography's rise as a medium of personal expression will be examined, as will technology's role in the creation of new regimes of spectatorship, and the mass dissemination of visual information. The class follows the rise of photography's acceptance as an art form in the twentieth century, and culminates with its prominence within the phenomenon of postmodernism. Prior coursework in modern history or art history is helpful. Enrollment limited 80.
Fall HIAA0075 S01 15312 MWF 10:00-10:50(14) (D. Nickel)

This undergraduate lecture course focuses on one building type, the house, through time in Mesopotamia, China, Japan, the Islamic world, the African diaspora, India, Britain, Rhode Island, and Germany and France. Houses can be minute or monumental, vernacular or high art, provide minimal shelter or afford the material and psychic satisfaction of home. By studying houses, we can bypass some of architectural history's biases, and explore some of the major debates in the discipline: What is architecture? Who determines what is included/excluded in this category? And on what basis do they make these claims? WRIT A Spr HIAA0081 S01 24267 MWF 11:00-11:50(04) (I. Osayimwese)

HIAA 0089. Contemporary Photography.
This course surveys the rise of photography in the art world in the period after 1960. It examines both the development of photography as an independent medium and the appropriation of lens-based imagery by Pop Art, conceptual art, minimalism, and eventually Postmodernity. HIAA 0089 S01 24269 F 3:00-5:30(15) (D. Nickel)

HIAA 0660. Giotto to Watteau: Introduction to the Art of Europe from Renaissance to French Revolution.
Giotto to Watteau introduces the great works of European art from the Renaissance to French Revolution. What ideas and forces enabled artists such as Leonardo da Vinci, Hieronymus Bosch, El Greco, Caravaggio, and Rembrandt to transform the visual world so profoundly that their innovations still radiate outwards through history into the present? What are the best terms and concepts to describe and understand the new styles that developed between 1300 and 1800? Lectures, discussion, reading, and direct looking consider these questions in a way that works for students at an introductory level. A Fall HIAA0660 S01 15303 TTh 1:00-2:20(10) (J. Muller)

HIAA 0710. The Other History of Modern Architecture.
This lecture course presents modern architecture as the product of the cultural, technological, political, and intellectual developments associated with capitalist expansion across the globe. By exploring the trans-Atlantic slave trade and its effects on Western industrialization, European Jesuit gardeners in China, modernization efforts in 19th century Turkey and Japan, and tropical climate and colonial policy in India, Nigeria, and other global sites; the course will expose students to the “99 percent” who are frequently excluded from discussions about modern architecture, but whose labor and cultural traditions were crucial to the heroic modernism of the West. A WRIT Fall HIAA0710 S01 15309 TTh 10:30-11:50(13) (I. Osayimwese)

HIAA 0801. Art After ‘68.
The tumultuous social unrest of the 1960s was concretized in a worldwide succession of civic revolts in 1968. Throughout this period, art was an organizing tool for various political events. In turn, the concept of 1968 generated an aesthetic response that supported, documented and historicized the period. This course will examine the art and new art forms created in the wake of 1968. We will also look closely at the strategies of contemporary art making that are influenced by the spirit of 1968. WRIT Fall HIAA0801 S01 15306 TTh 2:30-3:50(03) (C. Martin)

HIAA 0850. Modern Architecture.
The “classic” period of European and American modern architecture from the turn of the century to the 1950s. Presents both the established canon of masterpieces by among many others, Frank Lloyd Wright, Mies van der Rohe, and LeCorbusier, and counterbalances this approach with information about new building materials, changing conditions of architectural production, and the "mechanisms of fame." A Fall HIAA0850 S01 15313 MWF 12:00-12:50(12) (D. Neumann)

HIAA 1182. Spaces and Institutions of Modernity.
This undergraduate seminar will explore canonical and emerging theories of modernity as they intersect with our understanding of space and the role of the built environment and designed objects within it. The seminar will be organized as a series of case studies of the iconic sites and institutions of modernity (the metropolis, the world’s fair, the museum, the prison) as well as others that have also come to exemplify it (the ship, the plantation, the railroad, the colony). Class time will include analysis of primary documents and field trips to local sites. Spr HIAA1182 S01 26453 Th 4:00-6:30(17) (I. Osayimwese)

HIAA 1560A. Italy and the Mediterranean.
Sicily, Venice, and Rome were Medieval and Renaissance international centers whose populations of pilgrims, traders, soldiers, and diplomats occasioned opportunities for cultural cooperation and violence between East and West. We will study mosaics and architecture of the multi-ethnic Norman rule following the Islamic conquest of Sicily; Venetian relations with the Ottoman Empire and its Greek colonies in goods, painting styles, architecture and altars; and in Rome obsessions with Egyptian engineering, the vitality of Arabics studies, and reports of travelers resulting from papal efforts to incorporate Eastern Christians under the umbrella of the Roman church. Enrollment limited to 20 juniors and seniors. WRIT Spr HIAA1560A S01 24264 W 3:00-5:30(14) (E. Lincoln)

HIAA 1600A. Bosch and Bruegel: Art Turns the World Upside Down.
An in-depth look at the work of these two enigmatic Netherlandish artists. Art history uses various methods to establish what they actually painted and drew, we will move outwards to interpretation and historical study of their images of comedy, proverb, religion, and landscape. Artworks in local museums will be important focuses of discussion. Prerequisite: HIAA 0010 or 0500. Fall HIAA1600A S01 15304 Th 4:00-6:30(04) (J. Muller)

HIAA 1600C. Italian Baroque Painting and Sculpture.
Examines developments in painting and sculpture in 17th century Italy with focus on the impact of the Catholic church and the rediscovery of antiquity on church and palace decoration, public and private commissions, and the rhetoric of Baroque style and iconography. Study of individual artists, including Caravaggio, Artemisia Gentileschi, and Gianlorenzo Bernini, as well as art academies, the mechanics of patronage and writings about art and artists. Spr HIAA1600C S01 24266 M 3:00-5:30(13) (J. Muller)

HIAA 1870B. SoCal: Art in Los Angeles, 1945 to the Present.
Recent exhibitions, scholarship and media have turned to Los Angeles as a site of exploration of both American art and the larger frameworks of the Americas and international contemporary art. The character of media is directly connected to the circumstances of Los Angeles as a creative community built around an industry of visibility (film). This undergraduate seminar will examine postwar architecture, exhibitions, installation, land art, painting, performance, photography, public art and sculpture in Los Angeles and its impact on art history. This course may be open to a limited number of graduate students. WRIT Fall HIAA1870B S01 15307 F 3:00-5:30(11) (C. Martin)

HIAA 1910E. Project Seminar for Architectural Studies Concentrators.
A Spr HIAA1910E S01 24270 M 3:00-5:30(13) (D. Neumann)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Reading and reports on an approved topic, supervised by a member of the staff. Project proposals must be submitted and approved no later than the first week of the semester. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

The subject of the thesis and program of study will be determined by the needs of the individual student. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

HIAA 2440D. Architectural Reuse: The Appropriation of the Past.
This seminar will consider the survival, revival and adaptive reuse of older objects, texts and built spaces in the visual and material culture of successor cultures. We will look critically at the literature on the archaeology of memory, "Renaissance and revival, spolia studies and adaptive reuse." The seminar will examine selected case studies, including the reuse of sculptural elements in the Arch of Constantine, the conversion of Pantheon into a church and Hagia Sophia into a mosque, appropriated elements in the Qub mosque in Delhi and the adaptation of the Bankside Power Station as the Tate Gallery. Limited to 20.
Fall HIAA2440D S01 15302 M 3:00-5:30(15) (S. Bonde)

HIAA 2450. Exchange Scholar Program.
Fall HIAA2450 S01 14987 Arranged "To Be Arranged"

HIAA 2870H. What is Contemporary Art History.
Contemporary art history is a field in formation. As such, it is often contested and embraced, misunderstood and championed. Is contemporary art history a radical new field with a discrete set of practices, methodology and historiography? Or is contemporary art history simply a study of the present? Is the study of the contemporary relevant to other areas of art history? Is contemporary art history a model for other disciplinary approaches to the present? Throughout the term, this graduate seminar will discuss each of these questions. This course is open to students of all art historical periods.
Spr HIAA2870H S01 24265 W 5:30-7:50 (C. Martin)

HIAA 2920. Methods of Research Art and Historical Interpretation.
Required of first-year and second year history of art and architecture A.M./Ph.D. students. Enrollment limited to 20. Instructor permission required.
Fall HIAA2920 S01 15311 F 3:00-5:30(11) (D. Nickel)

HIAA 2940. Master's Qualifying Paper Preparation.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

HIAA 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for their doctoral examination.
Fall HIAA2970 S01 14988 Arranged "To Be Arranged"
Spr HIAA2970 S01 24014 Arranged "To Be Arranged"

HIAA 2980. Individual Reading (Single Credit).
Single credit. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

HIAA 2981. Individual Reading (Double Credit).
Double credit. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

HIAA 2982. Individual Reading for the Doctoral Candidate.
Single Credit. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

HIAA 2983. Dissertation Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

HIAA 2990. Thesis Preparation.
For graduate students who are preparing a thesis and who have met the tuition requirement and are paying the Registration Fee to continue active enrollment.
Fall HIAA2990 S01 14989 Arranged "To Be Arranged"
Spr HIAA2990 S01 24015 Arranged "To Be Arranged"

HIAA 2991. Dissertation Preparation.
For graduate students who are preparing a dissertation and who have met the tuition requirement and are paying the registration fee to continue active enrollment.
Fall HIAA2991 S01 14990 Arranged "To Be Arranged"
Spr HIAA2991 S01 24016 Arranged "To Be Arranged"

HIAA 2992. Master's Thesis Preparation.
For students preparing a terminal MA thesis, may be repeated in the following semester. Sign up for sections according to individual primary advisor.

HIAA XLIST. Courses of Interest to Concentrators.

International Relations
INTL 1803. Risk, Regulation and the Comparative Politics of Finance.
The course introduces students to the comparative history of finance as well as to alternative theories of regulation. It thereby develops students' ability to compare the role played by financial institutions in different historical periods and national contexts. This comparative perspective puts the recent financial crisis into a broader perspective, allowing students to see the structural as well as more proximate causes of recent financial instability in the industrialized democracies. Enrollment limited to 20 juniors and seniors. Priority given to IR, DS, and Public Policy seniors.
WRIT Fall INTL1803 S01 16086 W 3:00-5:30(17) (J. Ziegler)

Open only to Senior students accepted into the honors program in international relations. Instructor permission required. WRIT
Limited to juniors and seniors. Section numbers vary by instructor. Required: A completed proposal form and syllabus, sponsor's and concentration advisor's approval, and written permission from Dr. Elliott (following review of the proposal) prior to registering for any section of this course. Banner overrides will be given by the IR Program manager only, and no overrides will be issued after the Registrar's course add deadline.

INTL XLIST. Courses of Interest to Students Concentrating in International Relations.

Italian Studies
ITAL 0100. Elementary Italian.
 Elective for students without previous training in Italian. No credit for first semester alone. Fundamentals of Italian grammar and development of skills in speaking, comprehension, and writing. Overview of contemporary Italian society. Four meetings per week, audio and video work, two Italian films. Note: This is a year course.
Fall ITAL0100 S01 15042 MW 1:00-1:50(10) (C. Abbona-Sneider)
Fall ITAL0100 S01 15042 TTh 1:00-2:20(10) (C. Abbona-Sneider)
Fall ITAL0100 S02 15043 TTh 9:00-10:20(08) (C. Abbona-Sneider)
Fall ITAL0100 S02 15043 MW 10:00-10:50(08) (C. Abbona-Sneider)
Fall ITAL0100 S03 15044 TTh 10:30-11:50(13) (C. Abbona-Sneider)
Fall ITAL0100 S03 15044 MW 11:00-11:50(13) (C. Abbona-Sneider)
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Section</th>
<th>Time</th>
<th>CRN</th>
<th>Notes</th>
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<tr>
<td>ITAL 0110</td>
<td>Intensive Elementary Italian</td>
<td>(R. Martinez)</td>
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<td>Covers the same material presented in Italian 100-200. One semester equivalent to the standard two-semester sequence. Daily meetings plus audio and video assignments.</td>
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<tr>
<td>ITAL 0200</td>
<td>Elementary Italian</td>
<td>(R. Martinez)</td>
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<td>See Elementary Italian (ITAL 0100) for course description.</td>
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<tr>
<td>ITAL 0300</td>
<td>Intermediate Italian I</td>
<td>(C. Abbona-Sneider)</td>
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<td>Review of the fundamentals of grammar, with emphasis on speaking and writing. Reading of representative short stories. Weekly compositions, presentations, and a paper. Three Italian films. Prerequisite: ITAL 0100-0200, or ITAL 0110, or placement by examination. Requirement for enrollment in the Bologna Program.</td>
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<tr>
<td>ITAL 0400</td>
<td>Intermediate Italian II</td>
<td>(C. Abbona-Sneider)</td>
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<td>Review of specific grammar problems. Reading of one novel and newspaper articles. Compositions and oral presentations. Three Italian films. Prerequisite: ITAL 0300, or placement by examination.</td>
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<tr>
<td>ITAL 0500</td>
<td>Advanced Italian I</td>
<td>(C. Abbona-Sneider)</td>
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<td>The purpose of this advanced course is to improve speaking and writing skills by offering extensive practice in a variety of styles and forms. Students will discuss various aspects of contemporary Italian culture. Reading, analysis and class discussion of texts (articles, songs, pictures, short stories, movies and television), oral presentations, based on research, and a writing portfolio (compositions, essays, blog and a journal). Prerequisites: ITAL 0400, or placement by examination.</td>
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<tr>
<td>ITAL 0600</td>
<td>Advanced Italian II</td>
<td>(C. Abbona-Sneider)</td>
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<td>A sixth semester course with intensive practice in speaking and writing. Short stories, poems, music, and movies will be used to discuss Italian Society from the Second World War through the present. We will explore some important themes--family, religion, gender, and politics. Class discussion, compositions, oral presentations, and a final paper. Prerequisite: ITAL 0500, placement by examination.</td>
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<tr>
<td>ITAL 1000G</td>
<td>Italian Identity</td>
<td>(F. Fantarella)</td>
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<td>This course examines the process of the construction of Italian identity from National Unification until today. Through a close reading of Manzoni, De Amicis, Verga and Lampedusa's works, we investigate the formation of Italian identity through language, literature, food, and opera. We will also examine the problems of Post-Unification Italy: the economic and cultural gap between North and South and the Southern Issue. Finally, we will examine documentaries and readings that assess Italy today to analyze the feeling of not-belonging and estrangement, and the problematic search for a cohesive identity in a multicultural Italy within the European Union. Taught in Italian.</td>
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<tr>
<td>ITAL 1010</td>
<td>Dante in English Translation: Dante’s World and the Invention of Modernity</td>
<td>(M. Riva)</td>
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<td>Primarily for students with no knowledge of Italian. Given in English. Concentrators in Italian should enroll in ITAL 1610; they are expected to read the material in the original. Close study and discussion of Dante’s deployment of systems of retribution in the Inferno and rehabilitation in the Purgatorio with a view to imagining a society based on love and resistant to the effects of nascent capitalism and the money economy. Dante’s work summarizes and transforms the entire ancient and medieval tradition of literature, philosophy, and science. WRIT</td>
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<tr>
<td>ITAL 1020</td>
<td>Boccaccio's Decameron</td>
<td>(M. Riva)</td>
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<td>Close study and discussion of Boccaccio’s collection of 100 tales told by ten young Florentines over a period of two weeks, while in flight from the devastating plague of 1348. The Decameron defined the standard of Italian prose narrative for four centuries and deeply influenced Renaissance drama. We will also pay particular attention to visualizations and adaptations of the Decameron into a variety of media, from manuscript illumination to painting, theatre and film. Students will contribute to the Decameron Web, the award-winning Boccaccio web site administered by the department of Italian Studies. Sections in English and Italian. Enrollment limited to 40. WRIT</td>
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<tr>
<td>ITAL 1340</td>
<td>The Panorama and 19th-Century Visual Culture</td>
<td>(M. Riva)</td>
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<td>Throughout the 19th-century, the Panorama was a wildly popular ‘vision machine,’ the model for many later attractions from theme park rides to immersive educational spectacles like IMAX movies. In this course, we will use 21st-century vision technology to study the role of these cultural artifacts, optical media and storytelling devices in the shaping of 19th-century &quot;virtual reality.&quot; We will focus on three case studies: the Garibaldi panorama at the Brown library; the panorama of the Pilgrim's Progress at the Saco, Maine museum; and the Whaling Voyage 'round the world, at the New Bedford Whaling Museum. Taught in English.</td>
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<tr>
<td>ITAL 1390</td>
<td>Modern Italy</td>
<td>(M. Riva)</td>
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<td>Examination of Italian society, culture, and politics over the past two centuries. Topics include: the struggle to unify Italy in the 19th Century; the creation of a national identity; the political role of the Catholic Church; changing family life and gender relations; conflict between North and South; Mussolini and the fascist ventennio; and the struggle for political stability over the past 50 years.</td>
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<tr>
<td>ITAL 1610</td>
<td>The Divina Commedia: Inferno and Purgatorio</td>
<td>(D. Kertzer)</td>
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<td>A close reading of the first two canticles of Dante’s poem in the light of contemporary European and American critical interpretations. In Italian. Enrollment limited to 40.</td>
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<tr>
<td>ITAL 1620</td>
<td>The Divina Commedia: Dante’s Paradiso: Justifying a Cosmos</td>
<td>(R. Martinez)</td>
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<td>Close study of the third and final part of Divine Comedy, in which Dante unfolds how, in his view, the planetary and stellar spheres condition human life and fashion the Providential plan of history. There will be ancillary readings from Dante’s other works: Convivio, the Monarchia, and the Epistles. In Italian. Prerequisite: ITAL 0500 or 0600, or instructor permission. Enrollment limited to 40.</td>
</tr>
<tr>
<td>ITAL 1920</td>
<td>Independent Study Project (Undergraduate)</td>
<td>(R. Martinez)</td>
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<td>Undergraduate Independent Study supervised by a member of the Italian Studies Faculty. Students may pursue independent research in order to prepare for their honors thesis or honors multimedia project, or they may enroll in the course in order to work individually with a faculty member on a specific area of Italian Studies not covered in the current course offerings. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.</td>
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ITAL 1990. Senior Conference.
Special work or preparation of an honors thesis under the direction of a member of the staff. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ITAL 2050. Microhistory.
Microhistory emerged in the 1970s in Italy, but was quickly embraced by scholars across the globe. Microhistory questioned totalizing explanations of historical change; rejected anachronism in all forms; and recovered the voices of individuals left out of traditional historical narratives. This course explores and critiques the method. Participants write an article in their area of interest, informed by microhistory.

Spr ITAL2050 S01 25060 W 3:00-5:30(14) (C. Castiglione)

ITAL 2100. Introduction to Italian Studies.
This seminar, a requirement for graduate students in Italian Studies, has three objectives: 1) to provide a panoramic view of the current research in the interdisciplinary field of Italian studies (literature, history, arts and media); 2) to provide a picture of the professional state of the field, within the framework of more global developments in academia and the job markets; 3) to provide useful information about the resources and the new tools and techniques for research available to students at Brown and elsewhere (special collections in the Brown libraries, digital resources such as data bases, electronic journals, web projects, etc.). Participants write an article in their area of interest, informed by microhistory.

Fall ITAL2100 S01 16341 F 3:00-5:30(11) (M. Riva)

ITAL 2450. Exchange Scholar Program.
Fall ITAL2450 S01 14997 Arranged "To Be Arranged"
Spr ITAL2450 S01 24022 Arranged "To Be Arranged"

ITAL 2820. Italian Studies Colloquium.
The Italian Studies Colloquium is a forum for an exchange of ideas and work of the community of Italian scholars at Brown and invited outside scholars. Graduate students present their work in progress, and engage the work of faculty and visitors. They are expected to come prepared with informal questions on the topic presented. Presentations in both Italian and English. Instructor permission required.

Fall ITAL2820 S01 16345 F 12:00-1:30 (R. Martinez)
Spr ITAL2820 S01 25062 F 12:00-1:30 (R. Martinez)

ITAL 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall ITAL2970 S01 14998 Arranged "To Be Arranged"
Spr ITAL2970 S01 24023 Arranged "To Be Arranged"

ITAL 2980. Reading and Research.
Courses on special subjects individually planned and supervised. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

ITAL 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

Fall ITAL2990 S01 14999 Arranged "To Be Arranged"
Spr ITAL2990 S01 24024 Arranged "To Be Arranged"

Judaic Studies

BHBRI 0100. Introduction to Biblical Hebrew.
An intensive introduction to the fundamentals of biblical Hebrew grammar and vocabulary intended to prepare students to read biblical texts in the original language. For students with little or no prior knowledge of Hebrew.

Fall BHBRI0100 S01 15130 MWF 9:00-9:50(01) "To Be Arranged"

BHBR I 0200. Readings in Biblical Hebrew.
An introduction to the reading of biblical texts in Hebrew. Reading of selected texts from narrative, law, and poetry in the Hebrew Bible, with a few texts in post-classical Hebrew (the Dead Sea Scrolls and the Mishnah) introduced late in the semester. Intended for students who have completed BHBR I 010; others should consult the instructor.

Spr BHBRI0200 S01 24137 MWF 9:00-9:50(02) "To Be Arranged"

Hebrew

HEBR I 0100. Elementary Hebrew.
An introduction to the skills of reading, writing, and conversing in contemporary Israeli Hebrew. Students also read Hebrew texts adapted for their level of Hebrew based on biblical, rabbinic, and modern Hebrew literature, which introduce them to the approaches of Hebrew writers in various periods and to a variety of cultural issues. If registration is closed, please contact the professor and a wait list will be created. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special permission. Enrollment limited to 20.

Fall HEBRI0100 S01 15131 TTh 1:00-2:20(06) (R. Adler Ben Yehuda)
Fall HEBRI0100 S01 15131 MWF 1:00-1:50(06) (R. Adler Ben Yehuda)

HEBR I 0200. Elementary Hebrew.
This is the second half of a year-long course, an introduction to the skills of reading, writing, and conversing in contemporary Israeli Hebrew. Students also read Hebrew texts adapted for their level of Hebrew based on biblical, rabbinic, and modern Hebrew literature, which introduce them to the approaches of Hebrew writers in various periods and to a variety of cultural issues. Prerequisite: HEBR I 010. Students must have taken HEBR I 010 for credit to receive credit for this course. Exceptions must be approved by both the academic department and the Committee on Academic Standing. Enrollment limited to 20.

Spr HEBRI0200 S01 24138 TTh 1:00-2:20(06) (R. Adler Ben Yehuda)
Spr HEBRI0200 S01 24138 MWF 1:00-1:50(06) (R. Adler Ben Yehuda)

HEBR I 0300. Intermediate Hebrew.
Develops the skills of reading, writing, and conversing in contemporary Israeli Hebrew at the intermediate level and of reading Hebrew texts of the biblical, rabbinic, and modern periods (biblical stories, rabbinic legends, modern Hebrew poems, stories, essays, newspaper articles). Discussions and compositions focus on the psychological, cultural, political, and social issues reflected in the Hebrew sources that we study. Prerequisite: HEBR I 0200 or equivalent. Enrollment limited to 20. If unable to enroll because of closed registration, please contact the professor and a wait list will be created.

Fall HEBRI0300 S01 15132 TTh 12:00-12:50(12) (R. Adler Ben Yehuda)
Fall HEBRI0300 S01 15132 MWF 12:00-12:50(12) (R. Adler Ben Yehuda)

HEBR I 0400. Intermediate Hebrew.
Develops the skills of reading, writing, and conversing in contemporary Israeli Hebrew at the intermediate level and of reading Hebrew texts of the biblical, rabbinic, and modern periods (biblical stories, rabbinic legends, modern Hebrew poems, stories, essays, newspaper articles). Discussions and compositions focus on the psychological, cultural, political, and social issues reflected in the Hebrew sources that we study. Prerequisite: HEBR I 0300 or equivalent. Enrollment limited to 20. If unable to enroll because of closed registration please contact the professor and a wait list will be created.

Spr HEBRI0400 S01 24139 TTh 12:00-12:50(05) (R. Adler Ben Yehuda)
Spr HEBRI0400 S01 24139 MWF 12:00-12:50(05) (R. Adler Ben Yehuda)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HEBR 0500. Writing and Speaking Hebrew
Enables students to improve their skills in speaking and writing Hebrew on a variety of topics. Features advanced work on language structure and active language practice in the classroom. Class discussions of Israel and current events draw on Israeli stories, poems, television programs, and films and on the Israeli press. Students also compose essays and stories in Hebrew. Prerequisite: HEBR 0400 or equivalent. Enrollment limited to 20.
Fall HEBR0500 S01 15133 TTh 2:30-3:50(03) (R. Adler Ben Yehuda)

HEBR 0600. Issues in Contemporary Israeli Society, Politics, and Culture in Hebrew.
An exploration of current issues in contemporary Israeli society, politics, and culture: the Israeli-Palestinian conflict, tensions between ultra-orthodox and secular Jews, religion and state, Israel as a Jewish and democratic state, the economic gap between rich and poor, the integration of citizens from a variety of backgrounds (Jews of Middle Eastern, North African, Russian, and Ethiopian origins; Arab citizens of Israel), gender relations. Sources include films, television programs, Internet news, works of literature. Conducted in Hebrew. Emphasizes strengthening Hebrew reading, writing, and speaking skills. Prerequisite: HEBR 0500. Students who have not taken HEBR 0500 should see instructor for permission to enroll. DPLL Spr HEBR0600 S01 24140 MWF 10:00-10:50(03) (D. Jacobson)

Judaic Studies

JUDS 0500H. Israel's Wars.
Israel's history has unfolded under the shadow of its prolonged conflict with the Palestinians and its Arab neighbors. This first year seminar will survey the military aspect of this conflict. The major aim of the course is to present an historical survey of the Israeli-Arab wars and Jewish-Palestinian encounters in the 20th century. This will provide some of the necessary background for understanding the present phase of the Arab-Israeli conflict in the Middle East, and help in comprehending the roots and causes of contemporary controversies between Israel and the Palestinians and/or its Arab neighboring states. Enrollment limited to 20 first year students. FYS Fall JUDS0500HS01 15142 TTh 2:30-3:50(03) (R. Rojanski)

JUDS 0061. Foreigners, Refugees, and the Ethics of Minority.
This class interrogates the legal and ethical definitions of persons and homelands by examining the relationship between concepts of native and foreigner, hospitality and neighbor, refuge and exile, minority and majority. We will adopt historical, philosophical, and legal perspectives and take the Jewish historical experience of exile and minority as a jumping off point for discussing the contemporary refugee and migration crisis. The goal of this class is to contextualize liberal democratic debates over rights to mobility and mobility with historical religious and moral sources as well as to explore the possibilities for social integration of difference within pluralism. DPLL WRIT Spr JUDS0061 S01 24141 TTh 10:30-11:50(09) (P. Nahme)

The most “secular” presidential election in American history saw the language of Christian America apparently yield to a rhetoric of racism, misogyny, and white identity. But racialization and secularization are very much intertwined. In an effort to understand how “whiteness” is tied to the history of Christianity and secular, liberal democracies, this class will trace the figure of the “Jew” in the Christian imagination, and examine the racial and religious othering of Judaism as an entry point for reflecting upon contemporary American social and political struggles surrounding religious and racial identities. WRIT DPLL Fall JUDS0603 S01 16545 TTh 1:00-2:20(10) (P. Nahme)

JUDS 0682. How Bible Became Holy.
Over the past 2,000 years, people have killed and died for the Bible, and it continues to exercise a powerful if contested role in modern politics. Yet how did it achieve this power? This course will trace the development of the Hebrew Bible (Old Testament) from its origins in ancient Israel to its development about five hundred years later as a foundational text of both Judaism and Christianity. The focus will be on how Jews and early Christians throughout antiquity understood and ascribed authority to the Bible. DPLL WRIT Spr JUDS0682 S01 24869 TTh 2:30-3:50(11) (M. Satlow)

JUDS 0820. God and Poetry.
Throughout recorded history, poetry has expressed a variety of religious experiences. In this seminar we will read selections from biblical psalms, the biblical book of Job, and contemporary Christian and Jewish poetry, and explore how the language of poetry can serve as a means to convey the nature of relations between humanity and God. We will also seek to understand the underlying universal human psychological experiences reflected in the poems and how religiosity provides a framework for people to deal with those experiences. In our discussion of the contemporary Christian and Jewish poems, we will seek to understand the attempt of the poet to write about religious experience in a secular age. Students with a variety of cultural backgrounds and religious orientations (believers, agnostics, and atheists) are welcome. Enrollment limited to 20.
Fall JUDS0820 S01 15140 MWF 10:00-10:50(14) (D. Jacobson)

JUDS 1614. Heidegger, the Jews, and the Crisis of Liberalism.
This class explores the enduring legacy of Heidegger’s critique of Western philosophy in political, theological, and social thought. Focusing primarily upon Heidegger’s reception in 20th-century Jewish philosophy, we will explore the allure of Heideggerian thought and its implication in both left and right political critiques of liberalism. Topics include onto-theology, phenomenology, and radical historicism; science, hermeneutics, and methodology in the humanities; liberalism and the secular; ethics, politics, action; de-structuralization and deconstruction; time and the Other. Authors include Adorno, Arendt, Butler, Derrida, Levinas, Löwith, Marcuse, Rosenzweig, Schmitt, Strauss. DPLL WRIT Spr JUDS1614 S01 24143 W 3:00-5:30(14) (P. Nahme)

JUDS 1635. Problems in Israelite History.
Topics of recent and current debate among specialists in the field of Israelite history. Problems include (1) the historicity of the patriarchs and matriarchs; (2) the historical evidence relevant to the question of an exodus; (3) the nature of Israel’s settlement in Canaan; (4) the 10th century, era of empire or literary fiction? (5) the land of Judah after the Babylonian conquest. Enrollment limited to 20.
Fall JUDS1635 S01 15153 W 3:00-5:30(17) (S. Olyan)

JUDS 1650. Religion and Sexuality.
For millennia, religious thinkers have wrestled with the nature of sexuality. This class will examine how these thinkers have dealt with the essential questions that sexuality raises. Why do humans have sexual desire? Are there proper limits to sexual activity? While the focus of this class will be on Judaism and Christianity from antiquity to the present, we will also discuss Hindu, Muslim, and Tantrav topics. Topics to be addressed include: the nature and purpose of human sexual desire; contraception; adultery; homosexuality; abortion; and masturbation. No prerequisites. WRIT Fall JUDS1650 S01 15134 M 3:00-5:30(15) (M. Satlow)

This course surveys the history of Israel from its Proclamation of Independence in 1948 until today. Israel's history has unfolded under the shadow of its prolonged conflict with the Palestinians and its Arab neighbors. At the same time, an entirely new, vibrant and dynamic society and culture has developed there. This course aims to familiarize the student with the major outlines of Israel's development, and with different narratives and interpretations of that history. The reading materials and class discussions will examine not only the Arab-Israeli conflict, but also its influence on Israeli politics, society and culture. WRIT Spr JUDS1711 S01 24144 TTh 1:00-2:20(10) (R. Rojanski)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
JUDS 1713. Introduction to Yiddish Culture and Language.
Yiddish was the language spoken by most Jews in Eastern Europe and the countries to which they emigrated (including the U.S., England, South Africa, South American countries, and Israel) from the nineteenth century until after the Holocaust. It was the basis for a transnational Jewish culture and literature, and it played a central role in modern Jewish political life. We will explore the history of Yiddish culture and the development of the Yiddish press, literature, and cinema. The connection between Yiddish and modern Jewish politics will also be discussed. Students in this course will also have the opportunity to develop a basic knowledge of the Yiddish language. DPLL
Fall JUDS1713 S01 15143 Th 4:00-6:30(04) (R. Rojanski)

The seminar explores the relationship between humor, popular culture and Jewish ethnic identity in early 20th-century Europe and America. It argues that self-deprecating humor and satiric performance of Jewish stereotypes were not expressions of self-hatred, but complex cultural gestures that led to integration within mainstream society. Topics to be considered are: the joke as a social gesture; the Jewish music hall as an urban institution; the politics of blackface in American Vaudeville; the East-European Jews in Hollywood. DPLL
Spr JUDS1726 S01 24145 Th 4:00-6:30(17) (M. Gluck)

JUDS 1753. Blacks and Jews in American History and Culture.
African Americans and American Jews have helped reshape popular culture in twentieth-century America. Indeed, we cannot properly understand developments in popular music, theater, literature, film, or television without considering the peculiar dynamics of Black-Jewish relations. But what was the nature of their relationship? Was it collaborative or exploitive -- or both? How did the creative aspects function in conjunction with the business side of things? These are some of the key questions to be addressed in this course. WRIT DPLL
Spr JUDS1753 S01 24146 M 3:00-5:30(13) (R. Rojanski)

JUDS 1820. Holocaust Literature.
Readings in works of prose and poetry by victims and survivors of the Holocaust that portray experiences in ghettos, in concentration camps, and in hiding. Additional readings in works of the post-war era by survivors and their offspring. Discussion of the moral, psychological, religious, and cultural dimensions of the Holocaust and its ongoing impact on humanity. WRIT
Fall JUDS1820 S01 15141 MWF 11:00-11:50(16) (D. Jacobson)

Section numbers vary by instructor. Please see Banner for the correct course reference number (CRN) to use when registering for this course.

JUDS 1975. Honors Thesis Semester I.
First of two semesters working with a faculty member in the Program in Judaic Studies to complete an honors thesis. Instructor permission required.

JUDS 1976. Honors Thesis Semester II.
Second of two semesters working with a faculty member in the Program in Judaic Studies to complete an honors thesis. Instructor permission required.

JUDS 2450. Exchange Scholar Program.

Center for Language Studies
American Sign Language
SIGN 0100. American Sign Language I, II.
Introduces basic ASL conversation. Features core vocabulary, common signing phrases, non-manual components (facial expression, body gestures), signing space, fingerspelling, numbers, loan signs, cultural protocols, rules of ASL grammar and structure. Deaf cultural behavior is introduced in the classroom and through readings, videotapes, and Deaf community events. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special written permission. The final grade at the end of the course work in SIGN 0200 covers the entire year and is recorded as the final grade for both semesters.
Fall SIGN0100 S01 15053 MTWThF 10:00-10:50 (T. Riker)
Fall SIGN0100 S02 15054 MTWThF 12:00-12:50 (T. Riker)

SIGN 0200. American Sign Language I, II.
Introduces basic ASL conversation. Features core vocabulary, common signing phrases, non-manual components (facial expression, body gestures), signing space, fingerspelling, numbers, loan signs, cultural protocols, rules of ASL grammar and structure. Deaf cultural behavior is introduced in the classroom and through readings, videotapes, and Deaf community events. This is the second half of a year-long course. Students must have taken SIGN 0100 to receive credit for this course. If SIGN 0100 was taken for credit then this course must be taken for credit; if taken as an audit, this course must also be taken as an audit. Exceptions to this policy must be approved by both the academic department and the Committee on Academic Standing.
Spr SIGN0200 S01 24071 MTWThF 10:00-10:50 (T. Riker)
Spr SIGN0200 S02 24072 MTWThF 12:00-12:50 (T. Riker)

SIGN 0300. American Sign Language III.
Explores sociolinguistic aspects of ASL within the Deaf cultural context. Focuses on classifiers, linguistic principles related to dialogues and storytelling techniques (e.g., role-shifting, narrative structure). Deaf culture is experienced by attending events and by voluntary service to the Deaf community. Prerequisite SIGN 0200 or placement interview.
Fall SIGN0300 S01 15057 TTh 1:00-2:20(10) (T. Riker)

SIGN 0400. American Sign Language IV.
Intensive use of expressive and receptive skills in complex grammatical structures, advanced classifiers, dialogues, and storytelling techniques. Discussion of social factors that give rise to code-switching; regional and ethnic sign variations; social, political, and cultural evolution of U.S. Deaf community. Interaction with Deaf community in directed and non-directed activities. Prerequisite SIGN 0300 or placement interview.
Spr SIGN0400 S01 24073 TTh 1:00-2:20(10) (T. Riker)

SIGN 0500. American Sign Language V.
Focuses on the use of ASL discourse in formal as well as informal settings. Students will explore and present the advanced ASL genres of public speaking, artistic expression, formal discussion, interview, and narrative projects. Development of ASL vocabulary in specialized area not covered in previous courses. Prerequisite: ASL IV (SIGN 0400) or equivalent.
Fall SIGN0500 S01 15056 TTh 2:30-3:50(03) (T. Riker)

Independent study in an area of special interest to the student, with close guidance by a member of the faculty, and leading to a major paper/project. Required of candidates for honors, and recommended for third year students. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Prerequisite: SIGN 0500 or instructor permission. DPLL

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Arabic

**ARAB 0100. First-Year Arabic.**
Builds basic listening, speaking, reading, and writing skills, introducing the Arabic language in its cultural environment. Five contact hours per week, with an emphasis on grammar and communication, plus written, audio, and video assignments outside of class. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special written permission. The final grade at the end of the course work in ARAB 0200 covers the entire year and is recorded as the final grade for both semesters. If course is full, please sign the wait list in Room 205, 195 Angell Street. Enrollment limited to 18.

- **Fall**
  - ARAB0100 S01 15256 TTh 9:00-10:20(08) (M. Christoff)
  - ARAB0100 S02 15257 TTh 10:30-11:50(13) (A. Hassan)
  - ARAB0100 S03 15258 MW 11:00-12:50(13) (A. Hassan)
  - ARAB0100 S04 15259 TTh 1:00-2:20(10) (A. Hassan)

**ARAB 0200. First-Year Arabic.**
Builds listening, speaking, reading, and writing skills, at the low intermediate level of Arabic proficiency. Five contact hours per week, with an emphasis on grammar and communication, plus written, audio, and video assignments outside of class. This is the second half of a year-long course. Students must have taken ARAB 0100 to receive credit for this course. If ARAB 0100 was taken for credit then this course must be taken for credit; if taken as an audit, this course must also be taken as an audit. Exceptions to this policy must be approved by both the academic department and the Committee on Academic Standing. Enrollment limited to 18.

- **Spr**
  - ARAB0200 S01 24962 TTh 9:00-10:20(01) (M. Christoff)
  - ARAB0200 S02 24963 TTh 10:30-11:50(09) (A. Hassan)
  - ARAB0200 S03 24964 MW 11:00-12:50(09) (A. Hassan)
  - ARAB0200 S04 24965 TTh 1:00-2:20(10) "To Be Arranged"

**ARAB 0300. Second-Year Arabic.**
Develops listening, speaking, reading, and writing skills at the intermediate level of language proficiency through extensive use of various texts and multimedia. Promotes a better understanding of the Arabic cultural traditions. Five contact hours weekly, plus written, audio, and video assignments outside of class. Prerequisite: ARAB 0200. This is the first half of a year-long course whose first semester grade is normally a temporary one. Neither semester may be elected independently without special written permission. The final grade at the end of the course work in ARAB 0400 covers the entire year and is recorded as the final grade for both semesters. If course is full, please sign the wait list in Room 205, 195 Angell Street. Enrollment limited to 18.

- **Fall**
  - ARAB0300 S01 15055 MW 10:00-11:50(13) (M. Christoff)
  - ARAB0300 S02 15056 MW 1:00-2:50(13) (A. Hassan)
  - ARAB0300 S03 15254 TTh 1:00-2:20(10) (M. Faiza)

**ARAB 0400. Second-Year Arabic.**
Develops listening, speaking, reading and writing skills at the intermediate level of language proficiency through extensive use of various texts and multimedia. Promotes a better understanding of the Arabic cultural traditions. Five contact hours weekly, plus written, audio, and video assignments outside of class. Prerequisite: ARAB 0300. This is the second half of a year-long course. Students must have taken ARAB 0300 to receive credit for this course. If ARAB 0300 was taken for credit, then this course must be taken for credit; if taken as an audit, this course must also be taken as an audit. Exceptions to this policy must be approved by both the academic department and the Committee on Academic Standing. Enrollment limited to 18.

- **Spr**
  - ARAB0400 S01 24965 MW 10:00-11:50(09) (M. Christoff)
  - ARAB0400 S02 24966 MW 1:00-2:20(10) (M. Faiza)

**ARAB 0500. Third-Year Arabic.**
Offers comprehensive training in listening, speaking, reading, and writing, with grammar review as needed. Broadens students' perspective of Arabic culture using selections from the classical and modern traditions of Arabic writing and various art forms. Four contact hours weekly. Prerequisite: ARAB 0400.

- **Fall**
  - ARAB0500 S01 15987 MT 12:00-12:50 (M. Faiza)

**ARAB 0600. Third-Year Arabic.**
Offers comprehensive training in listening, speaking, reading, and writing with grammar review as needed. Broadens students' perspective of Arabic culture with selections from the classical and modern traditions of Arabic writing and various art forms. Four contact hours weekly. Prerequisite: ARAB 0500.

- **Spr**
  - ARAB0600 S01 24967 MTWTh 12:00-12:50 (M. Faiza)

**ARAB 0700. Advanced Arabic: Tales of the City.**
The Arab city, current site of a major political upheaval, is the central theme of this integrated-skill language and culture course. Images of cities, as multifaceted as the people who inhabit them, animate cinema screens and daily news reports, inspire masters of writing, artists, and musicians, arouse political activism. By engaging the complex representation of the urban theme in contemporary discursive and art forms, this course will enhance students' understanding of the dynamics of urban politics and culture in the Middle East, while building a content-specific lexicon and advanced communicative ability. Prerequisite: ARAB 0600, or an equivalent. Enrollment limited to 12.

- **Fall**
  - ARAB0700 S01 15988 MW 12:00-1:30 (M. Christoff)

**ARAB 0800. Advanced Arabic Language + Culture.**
This advanced content course entitled "Arab Women's Voices" invites students to delve into the female experience in Arab societies as articulated in stories, poems, films, interviews, and art work by and about women. Their multiple voices speak of old traditions and new realities, love and marriage, work and childbearing, war and freedom. They explore the male-female dynamics, question aged customs, and assert their own aspirations. The investigation of that complex theme promotes advanced linguistic capacity and cross-cultural awareness. Prerequisite: ARAB 0700, or an equivalent. Enrollment limited to 12.

- **Spr**
  - ARAB0800 S01 24969 TTh 2:00-3:50(11) (M. Faiza)

**ARAB 1990. Special Topics in Arabic Language, Literature, and Culture.**
Advanced level integrated skill course focusing on specific reading and writing topics derived from the traditions and arts of the Arabic language. Course prerequisites include advanced capacity in Arabic grammar and reading comprehension. Enrollment limited to 10.

**ARAB 2450. Exchange Scholar Program.**

Catalan

**CATL 1910. Independent Study in Catalan.**
An open content course, which may be offered each semester. Offered as an Independent Study, this course will be adapted to students' needs that are not currently covered by our curricular offerings.
## English for Internationals

**EINT 2100. Academic Discourse for Internationals.**
This course develops the English skills of first-year international graduate students who are preparing to be teaching assistants. Students improve their listening comprehension and fluency in conversational interactions typical of academic settings. Areas of spoken English that are addressed include pronunciation, stress patterns, intonation, vocabulary, and structure. Instructor permission required.

- **Fall EINT2100 S01 15205 MTWThF 11:00-11:50 (B. Gourlay)**

**EINT 2200. Academic Interactions.**
This course develops the English language skills of first-year international graduate students who are preparing to be teaching assistants. Students improve their fluency and expression of complex ideas in a variety of linguistic situations typical of classroom interactions. Students also increase their control of vocabulary, pronunciation and listening comprehension when communicating with American undergraduates. Instructor permission required.

- **Fall EINT2200 S01 15206 MTWTh 12:00-12:50 (B. Gourlay)**
- **Spr EINT2200 S01 24197 MTWTh 12:00-12:50 (B. Gourlay)**

**EINT 2300. Negotiating an American Classroom.**
In this course, international graduate students increase their abilities to communicate accurately and fluently in English with American undergraduates. International students develop their ability to interact, in culturally appropriate ways, in a variety of teaching situations common to an institution of higher education, where they are responsible for expressing and explaining complex information and ideas in English. Instructor permission required.

- **Fall EINT2300 S01 15207 MTWTh 9:00-9:50 (B. Gourlay)**
- **Spr EINT2300 S01 24198 MTWTh 9:00-9:50 (B. Gourlay)**

**EINT 2400. Speaking Professionally for Internationals.**
This course develops the English communication skills of international graduate students with an emphasis on intelligibility of speech and clarity of expression in a variety of teaching and professional situations (e.g. presenting material, responding to questions, directing discussions). Students develop increased facility of English in extended discourse when they are the authority in a teaching or other professional context. Instructor permission required.

- **Fall EINT2400 S01 15209 MWF 9:00-9:50(01) (B. Gourlay)**
- **Fall EINT2400 S02 15210 TTh 9:00-9:50 (B. Gourlay)**
- **Spr EINT2400 S01 24200 MW 9:00-9:50 (B. Gourlay)**
- **Spr EINT2400 S02 24201 TTh 9:00-9:50 (B. Gourlay)**

**EINT 2500. Advanced Articulation Tutorial.**
This course is an advanced pronunciation tutorial for international graduate students who have achieved a near-native speaker level of fluency in English, but who require greater precision of English articulations, pronunciation, fluency and/or expression. Instructor permission required.

- **Fall EINT2500 S01 15208 MTWTh 11:00-11:50 (B. Gourlay)**
- **Spr EINT2500 S01 24199 MTWTh 11:00-11:50 (B. Gourlay)**

## Hindi-Urdu

**HNDI 0100. Beginning Hindi or Urdu.**
Introduces conversation, reading, and writing of modern standard Hindi and the Devanagari script. Those who already know Devanagari but have rusty conversation skills may join the class second semester; obtain instructor's permission during the first semester. Those who prefer to learn Urdu and the Persian script should contact the instructor. Instructor permission required.

- **Fall HNDI0100 S01 15211 MTWThF 12:00-12:50 (A. Koul)**

**HNDI 0200. Beginning Hindi or Urdu.**
Introduces conversation, reading, and writing of modern standard Hindi and the Devanagari script. Those who already know Devanagari but have rusty conversation skills may join the class second semester; obtain instructor's permission during the first semester. Those who prefer to learn Urdu and the Persian script should contact the instructor. Prerequisite: HNDI 0100.

- **Spr HNDI0200 S01 24205 MTWThF 12:00-12:50 (A. Koul)**

**HNDI 0300. Intermediate Hindi-Urdu.**
A continuation of HNDI 0100-0200, which is a prerequisite. Introduces the variation of the Arabic script used for Urdu. Prepares students to communicate in written and spoken language. Activities are conducted in Hindi/Urdu. Meets four hours weekly.

- **Fall HNDI0300 S01 15212 MWF 1:00-1:50(06) (A. Koul)**

**HNDI 0400. Intermediate Hindi-Urdu.**
A continuation of HNDI 0100-0200. Introduces the variation of the Persian script used for Urdu. Prepares students to communicate in written and spoken language. Activities are conducted in Hindi/Urdu. Meets four hours weekly. Prerequisite: HNDI 0300.

- **Spr HNDI0400 S01 24208 Th 4:00-4:50(06) (A. Koul)**
- **Spr HNDI0400 S01 24208 MWF 1:00-1:50(06) (A. Koul)**

**HNDI 1080. Advanced Hindi-Urdu.**
Each student follows an independent reading list determined in consultation with the instructor. The readings may include folk tales, journalistic prose, 20th-century literature, classical Urdu poetry of the 17th to 19th centuries, or subjects in nonfiction. The class meets together three hours weekly for discussion. Each student also spends one hour weekly with the instructor. Prerequisite: HNDI 0400.

- **Fall HNDI1080 S01 15213 Arranged (A. Koul)**
- **Spr HNDI1080 S01 24203 Arranged (A. Koul)**

## Language Studies

**LANG 2900. The Theory and Practice of Foreign Language Learning and Teaching.**
The course is intended for graduate students in departments of foreign languages and literatures, who are interested in acquiring a theoretical understanding of second language acquisition (SLA) and language teaching methodologies and, by extension, developing a pedagogically sound teaching practice, grounded in research.

- **Spr LANG2900 S01 24210 T 9:00-11:30 (E. Balci)**

**LANG 2950. Advanced Seminar in Technology-Enhanced Language Pedagogies.**
This course is intended for graduate students in departments of foreign languages and literatures. The course introduces graduate students to the use of instructional technology in foreign language education, otherwise known as Computer-Assisted Language Learning (CALL). Specifically, the students will learn to evaluate, design, create, and implement a variety of technology-enhanced teaching and learning materials. A particular focus will be placed on forming the essential connections between Second Language Acquisition theories, sound pedagogical approaches, and cutting-edge technologies. Technologies to be explored in this class include, but are not limited to: software, interactive multimedia, Web 2.0 tools and learning management systems.

- **Fall LANG2950 S01 16498 Arranged (E. Balci)**

## Persian

**PRSN 0100. Basic Persian.**
Fast-paced course for beginners. Course stresses acquisition of Persian alphabet and basic grammatical patterns, beginning levels of speaking, listening, reading, and writing. Strong emphasis on the links between language and culture.

- **Fall PRSN0100 S01 15058 TTh 1:00-2:20(10) (I. Anvar)**
- **Fall PRSN0100 S01 15058 MW 1:00-1:50(10) (I. Anvar)**

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PHIL 1990. Individual Thesis Preparation. For Latin American + Caribbean Studies concentrators writing senior projects or honors theses.


LACA 1994. Independent Readings in Latin American and Caribbean Studies. For upper-division students interested in pursuing topics in Latin American and Caribbean Studies not currently taught in the Brown curriculum. Students must have significant prior coursework, language skills, and sufficient background knowledge to put together a comprehensive reading list and to produce a final paper that meets the research requirement in the LACA concentration. Class requirements include weekly meetings with the instructor, reading responses submitted before each meeting, and a self-assessment at the end of the semester by the student. The independent study will culminate in a research paper of sufficient depth and sophistication to meet the research requirement for the concentration in Latin American and Caribbean Studies. Registration requires a comprehensive reading list developed by the student in consultation with the faculty member and a written agreement on course requirements. The concentration advisor’s approval is required if the course is to count toward the concentration.

No more than two (2) semesters of LACA 1994/1995 may be used toward concentration requirements in Latin American and Caribbean Studies.

PRSN 0200. Basic Persian.
Fast-paced course for beginners. Course stresses acquisition of Persian alphabet and basic grammatical patterns, beginning levels of speaking, listening, reading, and writing. Strong emphasis on the links between language and culture. This is the second half of a year-long course. Students must have taken PRSN 0100 to receive credit for this course. If PRSN 0100 was taken for credit then this course must be taken for credit; if taken as an audit, this course must also be taken as an audit. Exceptions to this policy must be approved by both the academic department and the Committee on Academic Standing.

Fall PRSN0200 S01 24074 TTh 1:00-2:20(10) (I. Anvar)
Spr PRSN0200 S01 24074 MW 1:00-1:50(10) (I. Anvar)

PRSN 0300. Intermediate Persian Language and Culture.
Expands students’ proficiency in modern Persian language and culture; develops listening, speaking, reading and writing skills at the intermediate level through various texts and multimedia. Prerequisite: PRSN 0200.

Fall PRSN0300 S01 15059 TTh 10:30-11:50(13) (I. Anvar)

Expands students’ proficiency in modern Persian language and culture; develops listening, speaking, reading and writing skills at the intermediate level through various texts and multimedia. Prerequisite: PRSN 0300.

Spr PRSN0400 S01 24075 TTh 10:30-11:50(09) (I. Anvar)

PRSN 0500. Advanced Persian Language and Culture I.
For students who have completed PRSN 0400 or have acquired language skills above the intermediate level through contact with Persian in other ways. The main goal of this course is to improve speaking, listening, reading and writing skills and promote exposure to the culture. It will enable students to expand their knowledge of the language by studying samples of modern and classical Persian literature in order to advance toward mastery of contemporary literature. The course will motivate students to communicate both in written and spoken Persian by utilizing the adequate grammatical order and correct vocabulary. Prerequisite: PRSN 0400.

Fall PRSN0500 S01 15060 TTh 2:30-3:50(03) (I. Anvar)

PRSN 0600. Advanced Persian Language and Culture II.
Designed for students who have completed PRSN 0500 or have acquired language skills above the advanced level through other means. The main goal of the course is to improve speaking, listening, reading and writing skills and promote exposure to the language and culture through in depth study of samples of Persian literature, history, journals, newspapers, radio and TV material to advance toward mastery of contemporary literature. Students will be motivated to communicate both in written and spoken Persian by utilizing adequate grammatical order and vocabulary. Activities will include poetry reading, informal gatherings and translation from and into Persian. Prerequisite: PRSN 0500.

Spr PRSN0600 S01 24076 TTh 2:30-3:50(11) (I. Anvar)

PRSN 2890. Reading and Research.
Work with individual students in connection with special readings, problems of research, or preparation of theses. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Turkish

TKSH 0100. Introduction to Turkish Language and Culture.
This is a proficiency oriented introductory course to Turkish Language and Culture. It adopts and integrated skills approach and is designed for students with little or no prior knowledge of Turkish. The course combines an emphasis on the development of communicative competences with an understanding of language structures and grammar as well as insights into Modern Turkish society and culture. The aim is to introduce students to basic linguistic structures and develop the ability to comprehend and produce text, as well as to speak and understand speech, in a variety of contexts and registers. Enrollment limited to 18. DPLL.

Fall TKSH0100 S01 15068 MTWThF 2:00-2:50 (E. Balci)

TKSH 0200. Introduction to Turkish.
This is the second semester of a proficiency oriented introductory course to Turkish Language and Culture. It adopts an integrated skills approach and is designed for students who have taken Turkish 0100 or have placed into the class after consultation with the instructor or a placement exam. The course combines an emphasis on the development of communicative competences with an understanding of language structures and grammar as well as insights into Modern Turkish society and culture.

Spr TKSH0200 S01 24209 MTWThF 2:00-2:50 (E. Balci)

TKSH 0300. Intermediate Turkish.
This course is the continuation of TKSH 0200 designed for students who are interested in learning about other cultures and languages. New students can place into it, after special arrangements with the instructor. The course places equal emphasis on the development of the four language skills: speaking, listening, reading and writing. It combines an emphasis on the development of communication skills with an understanding of language structures and grammar and insights into Modern Turkish society and culture.

Fall TKSH0300 S01 16499 Arranged (E. Balci)

TKSH 0400. Intermediate Turkish II.
TKSH 0400 is designed for students who have taken TKSH 0300 and already studied Turkish language to develop proficiency at an advanced level. New students can place into it, after special arrangements with the instructor. The course places equal emphasis on further developing four skills (reading, listening, speaking, and writing) at an advance proficiency level as well as advanced compound and subordinate structures in grammar. It combines an emphasis on the development of communication skills with an understanding of the language and insights into Modern Turkish society and culture.

Spr TKSH0400 S01 25416 Arranged (E. Balci)

For Latin American + Caribbean Studies concentrators writing senior projects or honors theses.

For Latin American + Caribbean Studies concentrators writing senior projects or honors theses.

For upper-division students interested in pursuing topics in Latin American and Caribbean Studies not currently taught in the Brown curriculum. Students must have significant prior coursework, language skills, and sufficient background knowledge to put together a comprehensive reading list and to produce a final paper that meets the research requirement in the LACA concentration. Class requirements include weekly meetings with the instructor, reading responses submitted before each meeting, and a self-assessment at the end of the semester by the student. The independent study will culminate in a research paper of sufficient depth and sophistication to meet the research requirement for the concentration in Latin American and Caribbean Studies. Registration requires a comprehensive reading list developed by the student in consultation with the faculty member and a written agreement on course requirements. The concentration advisor’s approval is required if the course is to count toward the concentration.

No more than two (2) semesters of LACA 1994/1995 may be used toward concentration requirements in Latin American and Caribbean Studies.
### Literary Arts

**LITR 0100A. Introduction to Fiction.**
A workshop for first year students, introducing them to the art of writing fiction. This course is reading and writing intensive. Enrollment limited to 17. S/NC required. FYS WRIT

<table>
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<tr>
<th>Term</th>
<th>Course Code</th>
<th>Instructor</th>
<th>Days</th>
<th>Time</th>
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<td>S01</td>
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<td>S01</td>
<td>16675</td>
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<td>6:30-9:00PM</td>
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**LITR 0100B. Introduction to Poetry.**
A workshop for first year students, introducing them to the art of writing poetry. This course is reading and writing intensive. Enrollment limited to 17. S/NC required. FYS WRIT

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<tr>
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<td>16677</td>
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<td>6:30-9:00PM</td>
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</table>

**LITR 0110A. Fiction I.**
A workshop for students who have little or no previous experience in writing fiction. Enrollment limited to 17 per section. This course is limited to undergraduates. S/NC. WRIT

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<tr>
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<td>16681</td>
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**LITR 0110B. Poetry I.**
A workshop for students who have little or no previous experience in writing poetry. Enrollment limited to 17 per section. This course is limited to undergraduates. S/NC. WRIT

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<tr>
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<td>S03</td>
<td>16684</td>
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<td>6:30-9:00PM</td>
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**LITR 0210A. Fiction Writing II.**
Topics often include stylistic matters related to tone and point of view, and structural matters like controlling switches in time. See general course description above for course entry procedures for all intermediate workshops. Enrollment limited to 17. Instructor permission required. S/NC. WRIT

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<tr>
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**LITR 0210B. Writing Prose.**
Topics often include stylistic matters related to tone and point of view, and structural matters like controlling switches in time. See general course description above for course entry procedures for all intermediate workshops. Enrollment limited to 17. Instructor permission required. S/NC. WRIT

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<td>S02</td>
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<td>4:00-6:30(16)</td>
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**LITR 0510B. Into the Machine.**
Starting from Turing's work on artificial intelligence, we shall examine the cultural and artistic ramifications of the rise of the machine, using Marx and Walter Benjamin to provide a framework. We will look at how machines generate anxiety, with special emphasis on robots, puppets and automation; and we shall also consider utopian and dystopian images of machines, and visions of near and distant futures. Finally we will look at authors who utilize machine models of operation to generate artistic work. Authors and filmmakers include: Capek, E.T.A. Hoffman, Asimov, Lem, Breton, Redonet, Fritz Lang, Chaplin, Tati. Enrollment limited to 20 first year students. FYS WRIT

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<td>S01</td>
<td>16098</td>
<td>T</td>
<td>4:00-6:30(09)</td>
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**LITR 0610A. Unpublishable Writing.**
This workshop explores writing projects which do not fit into conventional avenues of print publication (i.e. books). Through a series of prompted artistic projects we will explore how writing can interweave in new relationships with time, materials, sequence, procedural approaches, performance, and collaboration. Independent research will support your creative projects throughout the semester. Enrollment limited to 12. S/NC. FYS WRIT

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<td>S01</td>
<td>24841</td>
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<td>12:00-2:30</td>
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**LITR 0710. Writers on Writing Seminar.**
Offers students an introduction to the study of literature (including works from more than one genre) with special attention given to a writer's way of reading. This course will include visits to the course by contemporary writers who will read to the class and talk about their work. Enrollment limited to 20 first year students. FYS WRIT

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**LITR 1010A. Advanced Fiction.**
The writing of short stories or longer works in progress in regular installments, along with appropriate exercises and reading assignments. See general course description above for course entry procedures for all advanced workshops. Written permission required. S/NC. WRIT

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<th>Term</th>
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<td>Spr</td>
<td>LITR1010A</td>
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<td>24843</td>
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<td>10:30-1:00</td>
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**LITR 1010B. Advanced Poetry.**
Course work includes a body of exercises, close reading of poetry, workshop conversations and conferences. See general course description above for course entry procedures for all advanced workshops. Instructor permission required. S/NC. WRIT

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<td>Spr</td>
<td>LITR1010B</td>
<td>S01</td>
<td>24850</td>
<td>M</td>
<td>3:00-5:30(13)</td>
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**LITR 1110N. Workshop for Potential Literature.**
A novel without the letter "E", 100,000-billion sonnets by permutation and texts that take the shape of a Mobius-Strip-- all this time and more, as workshop participants try their hands in writing in response to problems created by and inspired by a group of writers engaged in strange constraints and procedures. Instructor permission required. S/NC. WRIT

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<td>S01</td>
<td>24851</td>
<td>M</td>
<td>3:00-5:30(13)</td>
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**LITR 1110R. Performance Dimensions of Text.**
This workshop (modeled on a traditional "atelier") explores the relationships between the performative and the printed/textual, asking in particular how the page can serve as a dynamic blueprint for sound, video, movement, and theatrical practice. Weekly examples of works that have pushed the boundaries of literary genres by incorporating performative elements will be combined with student experimentation in long and short pieces. As an interdisciplinary workshop, this course invites students from all backgrounds. S/NC. Instructor's permission required. Enrollment limited to 12. WRIT

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<th>Term</th>
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<td>LITR1110R</td>
<td>S01</td>
<td>16094</td>
<td>T</td>
<td>12:00-2:30</td>
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</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
LITR 1110S. Fiction into Film.
A study of various directors’ attempts to transfer masterpieces of fiction into film. Concerning both genres we will ask Gertrude Stein’s question: What are masterpieces, and why are there so few of them? Includes fiction by Austen, Bierce, Carter, Cowley, Doyle, Faulkner, Forster, Fowles, Kesey, Joyce, McCullers, Morrison, Nabokov, O’Connor, Thompson, Walker, Spielberg, Woolf, Yamamoto as directed by Burton, Forman, Fellini, Gilliam, Huston, Jordan, Kurasa, Lee, Potter, and others. Class and weekly screenings. Enrollment limited to 12. S/NC. WRIT
Fall LITR1110S S01 16097 T 10:30-1:00 (M. Steinbach)

LITR 1150B. The Foreign Home: Interdisciplinary Arts.
Project-centered workshop for exploration beyond one’s “home” genre, whether in video, poetry, fiction, music, performance or visual arts. Contemporary and art-historical interdisciplinary works will ground our investigation into the tension between expertise and “beginner’s mind”. Collaborative and individual work expected. See general course description above for entry procedures for all special topics workshops/ seminars. Written permission required. S/NC. WRIT
Fall LITR1150B S01 24842 W 12:00-2:30 (T. Field)

LITR 1200. Writers on Writing.
Offers students an introduction to the study of literature (including works from more than one genre) with special attention given to a writer’s way of reading. This course will include visits to the course by contemporary writers, who will read to the class and talk about their work. Enrollment is limited to 30 students.
Fall LITR1200 S01 16105 Th 4:00-6:30(04) (L. Swensen)
Spr LITR1200 S01 24848 Th 4:00-6:30(17) ‘To Be Arranged’

LITR 1230E. Form and Theory of Fiction.
"Form and Theory of Fiction" offers an exploration of narrative theories directed particularly at creative writers, in conjunction with a hands-on examination of contemporary fictional narrative practices. Theoretical readings include historical essays on fiction and work by Gaston Bachelard, Mieke Bal, Gilles Deleuze, and others. Enrollment limited to 20.
Spr LITR1230E S01 24845 T 4:00-6:30(16) (J. Howard)

LITR 1300. Independent Study in Reading, Research, and Writing About Literature.
Provides advanced students with an opportunity to pursue tutorial instruction oriented toward a literary research topic.

LITR 1310. Independent Study in Creative Writing.
Offers tutorial instruction oriented toward some significant work in progress by the student. Typically taken by honors or capstone candidates in the antepenultimate or penultimate semester. See instructor to seek permission during the semester before undertaking the course of study. One advanced-level workshop is prerequisite. S/NC.
Spr LITR1410A S01 24844 T 10:30-1:00 (M. Steinbach)

LITR 1510. Honors Independent Study in Creative Writing.
Provides tutorial instruction for students completing their theses or capstone projects. Typically taken by honors or capstone candidates in their final semester. See instructor to seek permission during the semester before undertaking the course of study. S/NC.
Fall LITR2010A S01 16093 M 12:00-2:30 (T. Field)

LITR 2010B. Graduate Poetry.
Advanced practice of the art: a writing seminar, limited to graduate students in Literary Arts. Emphasis is placed on developing a better understanding of the creative process, strategies and forms. Written permission required. S/NC.
Fall LITR2010B S01 16104 W 12:00-2:30 ‘To Be Arranged’
Spr LITR2010B S01 24852 T 1:15-3:45 (L. Swensen)

LITR 2230. Graduate Independent Study in Reading, Research, and Writing About Literature.
Provides graduate students with an opportunity to pursue tutorial instruction oriented toward a literary research topic.

LITR 2310. Graduate Independent Studies in Literary Writing.
Offers tutorial instruction oriented toward some significant work in progress by the graduate student. S/NC.

LITR 2410. Graduate Thesis Independent Study in Literary Writing.
Provides tutorial instruction for graduate students completing their graduate creative theses. Typically taken in the final semester. See instructor to seek permission during the semester before undertaking the course of study. S/NC.

LITR 2450. Exchange Scholar Program.

Mathematics

MATH 0050. Analytic Geometry and Calculus.
MATH 0050 and 0060 provide a slower-paced introduction to calculus for students who require additional preparation. Presents the same calculus topics as MATH 0090, together with a review of the necessary precalculus topics. Students successfully completing this sequence are prepared for MATH 0100. May not be taken for credit in addition to MATH 0070 or MATH 0090. S/NC only.
Fall MATH0050 S01 15905 TTh 9:00-10:20(08) ‘To Be Arranged’

MATH 0060. Analytic Geometry and Calculus.
A slower-paced introduction to calculus for students who require additional preparation. Presents the same calculus topics as MATH 0090, together with a review of the necessary precalculus topics. Students successfully completing this sequence are prepared for MATH 0100. Prerequisite: MATH 0050 or written permission. May not be taken for credit in addition to MATH 0070 or MATH 0090. S/NC only.
Spr MATH0060 S01 24703 TTh 9:00-10:20(01) ‘To Be Arranged’

MATH 0070. Calculus with Applications to Social Science.
A one-semester survey of calculus for students who wish to learn the basics of calculus for application to social sciences or for cultural appreciation as part of a broader education. Topics include functions, graphs, logarithms, and integration; applications such as marginal analysis, growth and decay, optimization, and elementary differential equations. May not be taken for credit in addition to MATH 0050 or MATH 0060 or MATH 0090. S/NC only.
Fall MATH0070 S01 15906 MWF 9:00-9:50(01) (A. Landman)

MATH 0090. Introductory Calculus, Part I.
An intensive course in calculus of one variable including limits, differentiation, maxima and minima, the chain rule, rational functions, trigonometric functions, and exponential functions. Introduction to integration with applications to area and volumes of revolution. MATH 0090 and MATH 0100 or the equivalent are recommended for all students intending to concentrate in the sciences or mathematics. May not be taken for credit in addition to MATH 0050 or MATH 0060 or MATH 0070. S/NC only.
Fall MATH0090 S01 15909 MWF 9:00-9:50(01) ‘To Be Arranged’
Fall MATH0090 S02 15910 MWF 10:00-10:50(14) (D. Katz)
Fall MATH0090 S03 15911 MWF 12:00-12:50(12) ‘To Be Arranged’
Fall MATH0090 S04 15912 TTh 9:00-10:20(08) ‘To Be Arranged’
Fall MATH0090 S05 15913 TTh 10:30-11:50(13) ‘To Be Arranged’
Spr MATH0090 S01 24705 MWF 11:00-11:50(04) (D. Katz)
Spr MATH0090 S02 24706 MWF 2:00-2:50(07) ‘To Be Arranged’

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MATH 0100. Introductory Calculus, Part II. A continuation of the material of MATH 0090 including further development of integration, techniques of integration, and applications. Other topics include infinite series, power series, Taylor's formula, polar and parametric equations, and an introduction to differential equations. MATH 0090 or the equivalent are recommended for all students intending to concentrate in the sciences or mathematics.

- Fall MATH0100 S01 15924 MWF 11:00-11:50(16) (D. Katz)
- Fall MATH0100 S02 15925 MWF 12:00-12:50(12) "To Be Arranged"
- Fall MATH0100 S03 15926 TTh 2:30-3:30(06) "To Be Arranged"
- Fall MATH0100 S04 15927 MWF 2:00-2:50(07) "To Be Arranged"
- Fall MATH0100 S05 15928 TTh 10:30-11:50(13) "To Be Arranged"
- Spr MATH0100 S01 24711 MWF 9:00-9:50(02) "To Be Arranged"
- Spr MATH0100 S02 24712 MWF 10:00-10:50(03) (D. Katz)
- Spr MATH0100 S03 24713 TTh 9:00-10:20(01) "To Be Arranged"
- Spr MATH0100 S04 24714 TTh 10:30-11:50(09) "To Be Arranged"

MATH 0170. Advanced Placement Calculus. Begins with a review of fundamentals of calculus and includes infinite series, power series, paths, and differential equations of first and second order. Placement in this course is determined by the department on the basis of high school AP examination scores or the results of tests given by the department during orientation week. May not be taken in addition to MATH 0100.

- Fall MATH0170 S01 15939 MWF 1:00-1:50(03) "To Be Arranged"
- Fall MATH0170 S02 15940 MWF 9:00-9:50(01) "To Be Arranged"
- Fall MATH0170 S03 15941 TTh 9:00-10:20(08) "To Be Arranged"

MATH 0180. Intermediate Calculus. Three-dimensional analytic geometry. Differential and integral calculus for functions of two or three variables: partial derivatives, multiple integrals, line integrals, Green's Theorem, Stokes' Theorem. Prerequisite: MATH 0100, 0170, or 0190.

- Fall MATH0180 S01 15942 MWF 12:00-12:50(12) "To Be Arranged"
- Fall MATH0180 S02 15943 MWF 1:00-1:50(06) (M. Nastasescu)
- Fall MATH0180 S03 15944 TTh 1:00-2:20(10) "To Be Arranged"
- Spr MATH0180 S01 24723 MWF 9:00-9:50(02) "To Be Arranged"
- Spr MATH0180 S02 24724 MWF 12:00-12:50(05) "To Be Arranged"
- Spr MATH0180 S03 24725 TTh 1:00-2:20(10) "To Be Arranged"

MATH 0190. Advanced Placement Calculus (Physics/Engineering). Covers roughly the same material and has the same prerequisites as MATH 0170, but is intended for students with a special interest in physics or engineering. The main topics are: calculus of vectors and paths in two and three dimensions; differential equations of the first and second order; and infinite series, including power series and Fourier series. The extra hour is a weekly problem session.

- Fall MATH0190 S01 15949 MWF 11:00-11:50(16) (Y. Wu)
- Fall MATH0190 S02 15950 TTh 1:00-2:20(10) "To Be Arranged"

MATH 0200. Intermediate Calculus (Physics/Engineering). Covers roughly the same material as MATH 0180, but is intended for students with a special interest in physics or engineering. The main topics are: geometry of three-dimensional space; partial derivatives; Lagrange multipliers; double, surface, and triple integrals; vector analysis; Stokes' theorem and the divergence theorem, with applications to electrostatics and fluid flow. The extra hour is a weekly problem session. Recommended prerequisite: MATH 0100, 0170, or 0190.

- Fall MATH0200 S01 15954 MWF 9:00-9:50(01) "To Be Arranged"
- Fall MATH0200 S02 15955 MWF 12:00-12:50(12) "To Be Arranged"
- Fall MATH0200 S03 15956 MWF 1:00-1:50(06) (W. Lam)
- Spr MATH0200 S01 24730 MWF 12:00-12:50(05) "To Be Arranged"
- Spr MATH0200 S02 24731 MWF 1:00-1:50(06) "To Be Arranged"
- Spr MATH0200 S03 24732 MWF 2:00-2:50(07) "To Be Arranged"

MATH 0350. Honors Calculus. A third-semester calculus course for students of greater aptitude and motivation. Topics include vector analysis, multiple integration, partial differentiation, line integrals, Green's theorem, Stokes' theorem, the divergence theorem, and additional material selected by the instructor. Prerequisite: Advanced placement or written permission.

- Fall MATH0350 S01 15961 TTh 2:30-3:20(03) (S. Watson)
- Fall MATH0350 S02 15962 MWF 10:00-10:50(14) (S. Watson)

MATH 0420. Introduction to Number Theory. An overview of one of the most beautiful areas of mathematics. Ideal for any student who wants a taste of mathematics outside of, or in addition to, the calculus sequence. Topics include: prime numbers, congruences, quadratic reciprocity, sums of squares, Diophantine equations, and, as time permits, such topics as cryptography and continued fractions. No prerequisites.

- Spr MATH0420 S01 24737 TTh 2:30-3:50(11) (J. Silverman)

MATH 0520. Linear Algebra. Vector spaces, linear transformations, matrices, systems of linear equations, bases, projections, rotations, determinants, and inner products. Applications may include differential equations, difference equations, least squares approximations, and models in economics and in biological and physical sciences. MATH 0520 or 0540 is a prerequisite for all 1000-level courses in Mathematics except MATH 1260 or 1610. Recommended prerequisite: MATH 0180, 0200, or 0350. May not be taken in addition to MATH 0540.

- Fall MATH0520 S01 15963 MWF 10:00-10:50(14) "To Be Arranged"
- Fall MATH0520 S02 15964 MWF 11:00-11:50(16) "To Be Arranged"
- Fall MATH0520 S03 15965 MWF 2:00-2:50(07) "To Be Arranged"
- Spr MATH0520 S01 24745 MWF 9:00-9:50(02) "To Be Arranged"
- Spr MATH0520 S02 24746 MWF 11:00-11:50(04) "To Be Arranged"
- Spr MATH0520 S03 24747 MWF 12:00-12:50(05) "To Be Arranged"
- Spr MATH0520 S04 24748 TTh 1:00-2:20(10) (W. Lam)
- Spr MATH0520 S05 24749 TTh 10:30-11:50(11) (T. Aougab)

MATH 0540. Honors Linear Algebra. Linear algebra for students of greater aptitude and motivation, especially mathematics and science concentrators with a good mathematical preparation. Matrices, linear equations, determinants, and eigenvalues; vector spaces and linear transformations; inner products; Hermitian, orthogonal, and unitary matrices; and Jordan normal forms. Provides a more extensive treatment of the topics in MATH 0520. Recommended prerequisites: MATH 0180, 0200, or 0350.

- Fall MATH0540 S01 15966 MWF 2:00-2:50(07) (B. Pausader)
- Fall MATH0540 S02 15967 TTh 2:30-3:50(03) "To Be Arranged"
- Spr MATH0540 S01 24750 MWF 11:00-11:50(04) (S. Treil)
- Spr MATH0540 S02 24751 MWF 1:00-1:50(06) "To Be Arranged"

MATH 0750. Introduction to Higher Mathematics. This year-long class will expose students to six fundamental areas of mathematics. It will be team taught by six members of the faculty. Fall topics will include logic, combinatorics, and analysis. Spring topics will include number theory, algebra, and geometry. Approximately 4 weeks will be devoted to each topic.

- Fall MATH0750 S01 15977 TTh 1:00-2:20(10) "To Be Arranged"
- Spr MATH0760 S01 24763 TTh 1:00-2:20(10) "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
MATH 1010. Analysis: Functions of One Variable.
Completeness properties of the real number system, topology of the real line. Proof of basic theorems in calculus, infinite series. Topics selected from ordinary differential equations. Fourier series, Gamma functions, and the topology of Euclidean plane and 3-space. Prerequisite: MATH 0180, 0200, or 0350. MATH 0520 or 0540 may be taken concurrently. Most students are advised to take MATH 1010 before MATH 1130.
Spr MATH1010 S01 24753 TTh 2:30-3:50(09) (N. Kapouleas)

MATH 1040. Fundamental Problems of Geometry.
This class discusses geometry from a modern perspective. Topics include hyperbolic, projective, conformal, and affine geometry, and various theorems and structures built out of them. Prerequisite: MA 0520, MA 0540, or permission of the instructor.
Spr MATH1040 S01 24754 TTh 9:00-10:20(01) (W. Lam)

The study of curves and surfaces in 2- and 3-dimensional Euclidean space using the techniques of differential and integral calculus and linear algebra. Topics include curvature and torsion of curves, Frenet-Serret frames, global properties of closed curves, intrinsic and extrinsic properties of surfaces, Gaussian curvature and mean curvature, geodesics, minimal surfaces, and the Gauss-Bonnet theorem.
Fall MATH1060 S01 15968 TTh 9:00-10:20(08) (G. Daskalopoulos)

MATH 1110. Ordinary Differential Equations.
Ordinary differential equations, including existence and uniqueness theorems and the theory of linear systems. Topics may also include stability theory, the study of singularities, and boundary value problems.
Fall MATH1110 S01 15969 MWF 1:00-1:50(06) (Y. Wu)

MATH 1120. Partial Differential Equations.
The wave equation, the heat equation, Laplace's equation, and other classical equations of mathematical physics and their generalizations. Solutions in series of eigenfunctions, maximum principles, the method of characteristics, Green's functions, and discussion of well-posedness.
Spr MATH1120 S01 24755 MWF 10:00-10:50(03) (W. Strauss)

MATH 1130. Functions of Several Variables.
A course on calculus on manifolds. Included are differential forms, integration, and Stokes' formula on manifolds, with applications to geometrical and physical problems, the topology of Euclidean spaces, compactness, connectivity, convexity, differentiability, and Lebesgue integration. It is recommended that a student take a 1000-level course in analysis (MATH 1010 or MATH 1260) before attempting MATH 1130.
Fall MATH1130 S01 15970 TTh 10:30-11:50(13) (R. Kenyon)

MATH 1140. Functions Of Several Variables.
See Functions Of Several Variables (MATH 1130) for course description. Prerequisite: MATH 0520 or instructor permission.
Spr MATH1140 S01 24756 MWF 11:00-11:50(04) (J. Holmer)

MATH 1230. Graph Theory.
This course covers important material about graph theory, such as spanning trees, network flow problems, matching problems, coloring problems, planarity, Cayley graphs, spectral theory on graphs, and Ramsey Theory. The emphasis will be on a combination of theory and applications. Depending on the instructor, connections to such fields as combinatorics, geometry, or computer science might be emphasized. Prerequisite: MATH 0180, 0200 or 0350 and MATH 0520 or 0540 are recommended. Enrollment limited to 40.
Spr MATH1230 S01 24757 TTh 1:00-2:20(06) 'To Be Arranged'

MATH 1260. Complex Analysis.
Examines one of the cornerstones of mathematics. Complex differentiability, Cauchy-Riemann differential equations, contour integration, residue calculus, harmonic functions, geometric properties of complex mappings. Prerequisite: MATH 0180, 0200, or 0350. This course does not require MATH 0520 or 0540.
Fall MATH1260 S01 15971 TTh 1:00-2:20(10) (R. Kenyon)

MATH 1270. Topics in Functional Analysis.
Infinite-dimensional vector spaces with applications to some or all of the following topics: Fourier series and integrals, distributions, differential equations, integral equations, calculus of variations. Prerequisite: At least one 1000-level course in Mathematics or Applied Mathematics, or permission of the instructor.
Fall MATH1270 S01 15972 MWF 2:00-2:50(07) (A. Landman)

MATH 1410. Combinatorial Topology.
Topology of Euclidean spaces, winding number and applications, knot theory, fundamental group and covering spaces. Euler characteristic, simplicial complexes, classification of two-dimensional manifolds, vector fields, the Poincaré-Hopf theorem, and introduction to three-dimensional topology. Prerequisites: MATH 0520 or MATH 0540, or instructor permission.
Fall MATH1410 S01 15973 TTh 10:30-11:50(13) (G. Daskalopoulos)

MATH 1530. Abstract Algebra.
An introduction to the principles and concepts of modern abstract algebra. Topics include groups, rings, and fields; applications to number theory, the theory of equations, and geometry. MATH 1530 is required of all students concentrating in mathematics.
Fall MATH1530 S01 15974 TTh 2:30-3:50(03) (R. Schwartz)
Spr MATH1530 S01 24758 TTh 2:30-3:50(11) (R. Kenyon)

MATH 1540. Topics in Abstract Algebra.
Galois theory together with selected topics in algebra. Examples of subjects which have been presented in the past include algebraic curves, group representations, and the advanced theory of equations. Prerequisite: MATH 1530.
Spr MATH1540 S01 24760 TTh 10:30-11:50(09) (R. Schwartz)

MATH 1560. Number Theory.
A basic introduction to the theory of numbers. Unique factorization, prime numbers, modular arithmetic, quadratic reciprocity, quadratic number fields, finite fields, Diophantine equations, and additional topics. Prerequisite: MATH 1530 or written permission.
Spr MATH1560 S01 24761 MWF 2:00-2:50(07) (M. Nastasescu)

MATH 1580. Cryptography.
The main focus is on public key cryptography. Topics include symmetric ciphers, public key ciphers, complexity, digital signatures, applications and protocols. MATH 1530 is not required for this course. What is needed from abstract algebra and elementary number theory will be covered. Prerequisite: MATH 0520 or MATH 0540.
Fall MATH1580 S01 15975 MWF 10:00-10:50(14) (J. Silverman)

MATH 1610. Probability.
Basic probability theory. Sample spaces; random variables; normal, Poisson, and related distributions; expectation; correlation; and limit theorems. Applications in various fields (biology, physics, gambling, etc.). Prerequisites: MATH 0180, 0200 or 0350.
Fall MATH1610 S01 15976 MWF 11:00-11:50(16) 'To Be Arranged'

MATH 1620. Mathematical Statistics.
Central limit theorem, point estimation, interval estimation, multivariate normal distributions, tests of hypotheses, and linear models. Prerequisite: MATH 1610 or written permission.
Spr MATH1620 S01 24762 MWF 1:00-1:50(10) (J. Holmer)

MATH 1810A. Applied Algebraic Topology.
Topology is a powerful tool for identifying, describing, and characterizing the essential features of functions and spaces. In the recent years some of these methods have been adapted to study the shape of data collected from a range of different fields, including graphics and visualization, computational biology, etc. This course is an introduction to the basic concepts and topological structures behind these developments, focusing on persistent homology and mapper. Projects will involve using these methods to analyze and describe the shape of concrete data sets.
Spr MATH1810AS01 24764 MWF 10:00-10:50(03) 'To Be Arranged'

MATH 1970. Honors Conference.
Collateral reading, individual conferences. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.
Introduction to differential geometry (differentiable manifolds, differential forms, tensor fields, homogeneous spaces, fiber bundles, connections, and Riemannian geometry), followed by selected topics in the field. 
Fall MATH2010 S01 15978 Arranged (N. Kapouleas)

MATH 2050. Algebraic Geometry. 
Complex manifolds and algebraic varieties, sheaves and cohomology, vector bundles, Hodge theory, Kähler manifolds, vanishing theorems, the Kodaira embedding theorem, the Riemann-Roch theorem, and introduction to deformation theory. 
Fall MATH2050 S01 15979 Arranged (S. Lichtenbaum)

MATH 2060. Algebraic Geometry. 
See Algebraic Geometry (MATH 2050) for course description. 
Spr MATH2060 S01 24765 Arranged (D. Abramovich)

MATH 2110. Introduction to Manifolds. 
Inverse function theorem, manifolds, bundles, Lie groups, flows and vector fields, tensors and differential forms, Sard’s theorem and transversality, and further topics chosen by instructor. 
Spr MATH2110 S01 24766 Arranged (G. Daskalopoulos)

MATH 2210. Real Function Theory. 
Point set topology, Lebesgue measure and integration, Lp spaces, Hilbert space, Banach spaces, differentialiability, and applications. 
Fall MATH2210 S01 15980 Arranged (B. Pausader)

MATH 2220. Real Function Theory. 
The basics of Hilbert space theory, including orthogonal projections, the Riesz representation theorem, and compact operators. The basics of Banach space theory, including the open mapping theorem, closed graph theorem, uniform boundedness principle, Hahn-Banach theorem, Riesz representation theorem (pertaining to the dual of C_0(X)), weak and weak-star topologies. Various additional topics, possibly including Fourier series, Fourier transform, ergodic theorems, distribution theory, and the spectral theory of linear operators. 
Spr MATH2220 S01 24767 Arranged (B. Pausader)

MATH 2250. Complex Function Theory. 
Introduction to the theory of analytic functions of one complex variable. Content varies somewhat from year to year, but always includes the study of power series, complex line integrals, analytic continuation, conformal mapping, and an introduction to Riemann surfaces. 
Fall MATH2250 S01 15981 Arranged (S. Treil)

MATH 2260. Complex Function Theory. 
See Complex Function Theory (MATH 2250) for course description. 
Spr MATH2260 S01 24768 Arranged (S. Treil)

MATH 2410. Topology. 
An introductory course with emphasis on the algebraic and differential topology of manifolds. Topics include simplicial and singular homology, de Rham cohomology, and Poincaré duality. 
Fall MATH2410 S01 15982 Arranged (T. Goodwillie)

MATH 2420. Topology. 
See Topology (MATH 2410) for course description. 
Spr MATH2420 S01 24769 Arranged (T. Aougab)

MATH 2450. Exchange Scholar Program. 
Fall MATH2450 S01 15002 Arranged "To Be Arranged"

MATH 2510. Algebra. 
Basic properties of groups, rings, fields, and modules. Topics include: finite groups, representations of groups, rings with minimum condition, Galois theory, local rings, algebraic number theory, classical ideal theory, basic homological algebra, and elementary algebraic geometry. 
Fall MATH2510 S01 15983 Arranged (D. Abramovich)

MATH 2520. Algebra. 
See Algebra (MATH 2510) for course description. 
Spr MATH2520 S01 24770 Arranged "To Be Arranged"

MATH 2530. Number Theory. 
Introduction to algebraic and analytic number theory. Topics covered during the first semester include number fields, rings of integers, primes and ramification theory, completions, adeles and ideles, and zeta functions. Content of the second semester varies from year to year; possible topics include class field theory, arithmetic geometry, analytic number theory, and arithmetic K-theory. Prerequisite: MATH 2510. 
Fall MATH2530 S01 15984 Arranged (J. Hoffstein)

MATH 2540. Number Theory. 
See Number Theory (MATH 2530) for course description. 
Spr MATH2540 S01 24771 Arranged (J. Hoffstein)

MATH 2710A. Probability, Quantum Field Theory, and Geometry. 
Fall MATH2710A S01 15986 Arranged (M. Chan)

MATH 2970. Preliminary Exam Preparation. 
No description available. 
Fall MATH2970 S01 15003 Arranged "To Be Arranged" 
Spr MATH2970 S01 24027 Arranged "To Be Arranged"

MATH 2980. Reading and Research. 
Independent research or course of study under the direction of a member of the faculty, which may include research for and preparation of a thesis. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. 
Fall 2017 
The following courses may be taken for credit by graduate students majoring in Mathematics. Please check with the sponsoring department for times and locations. 
Applied Mathematics 
APMA 2230 Partial Differential Equations 
APMA 2630 Probability 
Spring 2018 
The following courses may be taken for credit by graduate students majoring in Mathematics. Please check with the sponsoring department for times and locations. 
Applied Mathematics 
APMA 2240 Partial Differential Equations 
APMA 2640 Theory of Probability

Medieval Studies

MDVL 0150C. The Medieval King Arthur (ENGL 0150C). 
Interested students must register for ENGL 0150C. 
Fall MDVL0150C S01 16806 Arranged "To Be Arranged"

MDVL 1310T. Chaucer (ENGL 1310T). 
Interested students must register for ENGL 1310T. 
Fall MDVL1310T S01 16087 Arranged "To Be Arranged"

Tutorial instruction on an approved topic in Late Antique and/or Medieval cultures, supervised by a member of staff. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. May be repeated once for credit. 
Independent research and writing on a topic of special interest to the student, under the direction of a faculty member. Required of candidates for honors. Permission should be obtained from the Director of the Program in Medieval Studies.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Middle East Studies

MES 0155. Cultures of the Contemporary Middle East.
In our exploration of Middle Eastern social movements, this course addresses the role of culture and art in social change; the relationship between faith and politics; as well as the impact of national, regional, and transnational discourses on identity, ethics, and citizenship. The study of social movements in the region will address the impact of technology, media, women’s rights and LGBT movements, as well as economic liberalization, entrepreneurship, and the politics of oil. Finally, we will trace the emergence and consequences of the “Arab Spring.”
DPLL
Fall MES0155 S01 16427 TTh 2:30-3:50(03) (S. Tobin)

MES 1200. Visual Politics in the Contemporary Middle East.
The course examines visual politics in contemporary Middle Eastern society and grapples with fundamental debates in the study of the cultural politics and visual cultures of the Arab region in a global context. We will contextualise the region’s contemporary visual cultures within wider debates and scholarship on the construction of subjectivities, the distribution of power, the formation of identity and belonging, and culture and representation. Emphasis is on translation and reception in a global context and transnational frame by focusing on how states and security, conflicts and displacements, social movements and revolution, aesthetics, art and global media are linked, characterized, analyzed.
DPLL
Fall MES1200 S01 16425 Th 4:00-6:30(04) (H. Toukan)

MES 1300. Intellectual Change: From Ottoman Modernization to the Turkish Republic.
A critical survey of Ottoman intellectual history in the 19th and early 20th centuries. Modernization, formation of the modern state and issues of nationalism and other ideologies of the time will form the main framework, analyzing their political, social and cultural impact on intellectual and academic production in the Ottoman Empire and through the making of Republican Turkey. It is a history of mentalities organized around four thematic/chronological modules, each representing a set of concepts, ideas, movements as well as facts and problems, which will be compared to the larger world of modern state formation both in thought and practice.
DPLL
Fall MES1300 S01 16478 T 4:00-6:30(09) (M. Toksoz)

Limited to juniors and seniors. Section numbers vary by instructor. Please check Banner for the correct section and CRN to use when registering for this course. Required: all proposals for independent study must be approved by the faculty sponsor and the MES program director. Students should not register for any section of MES 1970 without this approval.

MES 2000A. Decolonizing the Racialized Female Subject: Black and Indigenous Women’s Self-Making Under Empire.
This study grapples with conceptions of freedom and humanity emergent in Black and Indigenous women’s practices under empire. Colonialism is prefaced on construction of an “other.” Aime Césaire refers to this as “thingification,” whereby colonial subjects are dehumanized and the colonizer “decolonized.” Totalizing dehumanizing forms are resisted by praxes and epistemologies which challenge the prevailing symbolic order and assert the humanity of those regarded as subhuman. We will examine how epistemological and political contestations of the human inform discourses on freedom and sovereignty and interrogate how various categories of identity refract and re-frame conceptions of humanity, freedom, and sovereignty.

MES XLIST. Courses of Interest to Students Concentrating in Middle East Studies.
For information on courses which may be of interest to students concentrating in Middle East Studies, please refer to the MES XLIST in the Class Schedule menu.

Modern Culture and Media

MCM 0150. Text/Media/Culture: Theories of Modern Culture and Media.
An introduction to the theoretical foundations of contemporary cultural criticism. We will study theories of representation, signification and culture; image and narrative, ideology and discursive power; and modernity and postmodernity. Such theories are crucial to understanding modern culture and media (including print, photographic, film, television, and digital media texts). Readings from theorists such as Saussure, Benjamin, Levi-Stauss, Derrida, Barthes, Marx, Freud, Fanon, Arendt, Foucualt, Irigaray, Appadurai, and Butler. Students must register for both the lecture and one screening; a signup sheet will be available for discussion sections after the first class meeting. Open to undergraduates only.
WRIT
Spr MCM0150 S01 24313 MW 1:00-1:50 (B. Honig)

Print media are ubiquitous, appearing in myriad forms, material configurations, and genres. This course investigates the concept of print as a mass medium, the first produced by means of mechanical reproduction. We will give particular attention to the theoretical problematic that governs its analysis and to competing concepts of print as a form. The course will trace the emergence of mass literacy and reading habits, print culture and the public sphere, the rise of the novel and history of the book, as well as concepts of literariness and representation, mediation and signification, narrativity and virtuality, the work and the text.
Fall MCM0220 S01 15341 MW 1:00-1:50 (E. Rooney)

MCM 0240. Television Studies.
Introduces students to the rigorous study of television, concentrating on televisual formations (texts, industry, audience) in relation to social/cultural formations (gender, generational, and family dynamics; constructions of race, class, and nation; consumerism and global economic flows). That is, this course considers both how television has been defined and how television itself defines the terms of our world. Students MUST register for the lecture section, the screening, and a conference section. Open to undergraduates only.
WRIT
Fall MCM0240 S01 15348 TTh 2:30-3:20 (L. Joyrich)

MCM 0710. Introduction to Filmic Practice: Time and Form.
A studio-style course on working with time based media, focused specifically on the technology of 16mm film production. With its focus on photographic and montage processes, as well as lighting and sound, the principles established in this course provide a solid foundation for all subsequent work in media, whether cinematic, video or new media, and it is strongly advised as a foundation level, skills oriented media course. Students produce a series of short, non-sync films. No previous experience required. Screenings, demonstrations and studio work.
Spr MCM0710 S01 24323 W 2:00-4:50 (L. Thornton)

MCM 0730. Introduction to Video Production: Critical Strategies and Histories.
Provides the basic principles of independent media production through a cooperative, hands-on approach utilizing digital video. Emphasizes video as a critical intervention in social and visual arts contexts. A major project, three shorter works, and in-class presentations of work-in-progress required. Weekly screenings contextualize student work. No previous experience required. Application required. Application is available in the MCM office. Students must bring a completed application to the first class to be considered for admission. Up to 40 students can apply, but the final class list of 12 will be determined after this meeting, with permission of the instructor.
Fall MCM0730 S01 15354 Th 4:00-6:50 (A. Cokes)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
A production course that examines the role of sound in film, video, and installation forms. The listening assignments and visual media screenings will foreground the usage of audio in the works of selected artists/filmmakers. The course also considers works of sound art. Readings by sonic theorists and producers will examine the possibilities of sound production as a key register of modern social and aesthetic experience. Class members should have completed at least one time-based media class. Students are expected to be competent technically. Application required. Application is available in the MCM office. Students must bring a completed application to the first class to be considered for admission. The final class list will be determined after this meeting, with permission of the instructor. Enrollment limited to 15. S/NC. 
Spr MCM0780 S01 24340 W 10:00-12:50 (A. Cokes)

MCM 0902C. Digital Media in the Time of Ecological Crisis.
In a time characterized by anthropogenic climate change, militaries forecast climate refugees, scientific communities broadcast the end of ‘nature’ while politicians engineer influence in a media ecosystem. What are the politics of how media represents science, the environment and ecological crisis? This course considers the historical emergence of digital media alongside ecology. By studying the exchange between scientific knowledge, digital technology and the communication of environmental crises at local and global scales, we will attempt to establish an interpretative framework for the matrix of politics, power, inequality and violence that accompanies the historical and temporal conditions consistent with climate change. DPLL
Fall MCM0902C S01 16834 F 3:00-5:30(11) (T. Pringle)

MCM 0902D. The Visual Culture of Suffering.
This seminar explores how suffering is constructed as a visual phenomenon. Through close analysis of photographs, films, monuments, and exhibitions, we will explore how suffering has been deployed, and the sort of meanings it has been assigned. We will examine four specific scenes of historical suffering: lynching and Reconstruction, The Holocaust, Hiroshima, and 9/11. DPLL
Fall MCM0902D S01 16831 T 4:00-6:30(09) (J. Johnson)

MCM 0902E. In Design: Layouts of Modern Media and Design.
This course aims to engage with media and design by thinking critically about them and asking questions about their relationship to the larger culture. We will survey design elements and principles and show how they construct products and media. Beginning from the basics, we will move onto systems to demonstrate how they lay out the rules of design. We will then move to digital media in which the design elements are re-organized by new uses of old principles and inventions of new ones. Readings include: Ranciere, Latour, Flusser, Bloch, and Baudrillard, alongside with Lupton, Buchanan, Papanek, Dunne and Raby. WRIT
Spr MCM0902E S01 25540 T 4:00-6:30(16) (S. Jung)

MCM 0902F. Post Cinema? Histories and Politics in the “Digital Revolution”.
The rapid influx of digital technology and so-called “new media” around the new millennium has led some to suggest that Cinema—conceived of as a photochemical technology experienced publicly as a mid-twentieth century cultural phenomenon—is dead or dying. This course explores the political and historical stakes of this claim, taking an archaeological and genealogical approach to problematize notions of technological progress and periodization. Rather than seeking to “rescue” cinema, we will instead explore how “the cinematic” has been adopted and dismantled by the logics of neoliberal governmentality, and what it can still offer for modes of political resistance. 
Spr MCM0902F S01 25541 M 3:00-5:30(13) (M. Ellis)

MCM 1203F. Aesthetics of Political Cinema: From Montage to Political Modernism.
In the 1920s, Russian filmmakers with political concerns blended mass cinema and innovative avant-garde and modernist filmmaking styles. Their most famous filmmaker, Sergei Eisenstein, elaborated his concept of montage to explain his ideas of cinema. This course will examine the heritage and strategies of political filmmaking which draws on modernist aesthetics, beginning from the montage filmmaking of the 1920s. Some emphasis on 1920s and 1960s-70s, but not limited to those years. Work by filmmakers such as Eisenstein, Vertov, Brecht, Ivans, Capra, Godard, Marker, Oshima, Bertolucci, Taviani Brothers, Kluge, Fassbinder, Akerman, Rainer, Mulvey, Solanas, Hondo, Gerima, and/or others. 
Spr MCM1203F S01 25543 TTh 1:00-2:20(10) (P. Rosen)

MCM 1503E. Aesthetic Theory/Cultural Studies.
Aesthetic thought has a long and varied history, but aesthetic categories have recently become a central concern of cultural studies. This course combines readings in the history of aesthetics; twentieth-century work on aesthetics from various philosophical and disciplinary perspectives (from the “anti-aesthetic” to “a return to aesthetics”); and recent scholarship addressing (while not necessarily celebrating) the reemergence of aesthetic questions in cultural and media studies and the evolving relationship of the aesthetic to categories such as ideology, form, and virtuality. Readings from Schiller and Kant to Adorno, Berube, Foster, Ranciere, and Spivak.
Spr MCM1503E S01 24348 Th 4:00-6:30(17) (E. Rooney)

MCM 1504R. Iranian Cinema.
The emergence in the 1980s of Iranian cinema onto the world stage caught many by surprise. This cinema has, however, had a long and illustrious history. While attempting to provide an historical survey of these films, we will focus primarily on those produced in the last two decades. We will pay close attention to cinematic form but will also examine the ways the films intersect with cultural-political events, including the Revolution and the subsequent Islamization of the culture, the institutionalization of the “modesty system,” and the alteration of divorce laws. DPLL
Fall MCM1504R S01 16205 T 1:20-3:50 (J. Copeic)

MCM 1700D. Reframing Documentary Production: Concepts and Questions.
An advanced seminar for students of video and/or film production. Focuses on the critical discussion and production of documentary media. A major project (10-20 minutes), three shorter works, and in-class presentations of work-in-progress required. Readings on the theory and practice of the form and weekly screenings augment the presentation of student work. Class members should have completed at least one time-based media class. Students are expected to be competent technically. Application required. Application is available in the MCM office. Students must bring a completed application to the first class to be considered for admission.
Fall MCM1700D S01 15357 W 10:00-12:50 (A. Cokes)

MCM 1700Z. What is Happening to Narrative?
An advanced media production seminar about the impression of digital technology on the practice of media based storytelling. We begin with questions: are we still interested in telling stories? What kinds of stories do we tell? Are there narratives specific to particular technics? What happens when technology makes things “easier”? We explore forms that work well online, on smart devices, or in theaters and TV. This workshop includes group experiments and a major individual project that may be linear, installation, or interactive in format. Projects should function as a stimulus and a challenge to conventional practices of duration-based narrative. 
Spr MCM1700Z S01 24349 T 1:00-3:50 (L. Thornton)

Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Time dedicated to the project should fall within the recommended range for independent studies (10-20 hours per week).
MCM 1990R. Honors Thesis/Project in Modern Culture and Media.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Eighth semester students only.

Time dedicated to the project should fall within the recommended range for independent studies (10-20 hours per week).

This seminar will question the concept of "collaboration" through a variety of moments and projects of collaboration between photographers, photographed persons and spectators that take place in different geo-political contexts. Collaboration is a form of relation that may be idiyllic or problematic, liberating or coercive, generating knowledge or disseminating ignorance, empowering or intimidating, involving assistance and solidarity as much as abuse; it may take place among friends or between enemies, and it may create friendship as much as it may complicate it. Reviewing this spectrum of possibilities we shall ask how collaboration informs and transforms the event of photography.

Fall MCM2100R S01 15409 Th 4:00-6:30(04) (A. Azoulay)

MCM 2310H. Television Realities.
How does television bring "real" events to us? How do we define or know what's "real"? What kinds of "realities" exist on television, and how do they operate (in relationship to one another, to TV fantasy, to social structures, and to our everyday lives)? This course will consider not only some specific "reality genres" (news, catastrophe coverage, "live" and "historical" programs, "surveillance programming," documentary and docudrama, talk and game shows, reality series and "docu-soaps") but the representational modes that define the reality of commercial television as a whole. This course is for Graduates only. Underclass undergraduates require instructor's permission.

Spr MCM2310H S01 24351 Th 3:00-5:30(14) (L. Joyrich)

MCM 2310M. Politics and Literature.
This course will identify a set of key themes in the field of politics and literature and examine them using methods and theoretical frameworks from political theory and literary studies. It is a cross-disciplinary course meant to promote collaboration and self-reflection about disciplinary method and interdisciplinarity, using key examples from the field. Likely themes and concepts include: the ideology of form, affect, ethos, and the relation between political practice and literary mode, political mode and literary practice. Texts will include classical tragic or comic drama, the modern novel, melodramatic film, and the literary essay.

Spr MCM2310M S01 24361 Th 1:00-3:30 (B. Honig)

MCM 2450. Exchange Scholar Program.
Fall MCM2450 S01 15005 Arranged 'To Be Arranged'

MCM 2980. Independent Reading and Research in Modern Culture and Media.
Individual reading and research for doctoral candidates. Not open to undergraduates. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Time dedicated to the project should fall within the recommended range for independent studies (13-20 hours per week).

MCM 2990. Thesis Preparation.
No description available.

Fall MCM2990 S01 15006 Arranged 'To Be Arranged'
Spr MCM2990 S01 24029 Arranged 'To Be Arranged'

Music

MUSC 0021B. Reading Jazz.
This course will explore the musical aesthetics of jazz in texts about its world. Students will listen to music and read poetry, fiction, autobiography and criticism to investigate techniques (including improvisation, rhythm, timbre and articulation), which authors such as Langston Hughes, Ralph Ellison, Charles Mingus, Stanley Crouch and Jack Kerouac employed to describe and support a creative community. Enrollment limited to 20 first year students. FYS DPLL WRIT

Fall MUSC0021BS01 16559 Th 4:00-6:30(04) (M. McGarrell)

MUSC 0400. Introduction to Music Theory.
An introduction to musical terms, elements, and techniques, including notation, intervals, scales and modes, triads and seventh chords, modulation, melody writing and harmonization, analysis, and composition. Ear-training and sight-singing are included. For students with some musical training. Enrollment limited to 40.

Fall MUSC0400 S01 16769 MW 11:00-11:50(16) (E. Nathan)
Spr MUSC0400 S01 25492 MW 11:00-11:50(04) 'To Be Arranged'

MUSC 0550. Theory of Tononal Music.
Prerequisite to music concentration. For students with knowledge of rudiments of music, including scales, intervals, key signatures, rhythm, and meter. Knowledge of keyboard strongly recommended. Intensive study of voice leading and tonal harmony; analysis, ear training, sight singing, keyboard exercises. An entrance exam will be administered in Orwig 315 at the first regular class meeting. Students intending to enroll in MUSC 0550 must pass this test. Experienced instrumentalists or singers who have facility sight reading music normally place into MUSC0550. MUSC0400 is appropriate for students who need training in the rudiments to prepare for MUSC0550. MUSC0550 is prerequisite to MUSC0560.

Fall MUSC0550 S01 16528 Th 10:30-11:50(13) (E. Nathan)
Fall MUSC0550 S02 16529 Th 1:00-2:20(10) (M. Steinbach)

See Theory Of Tonal Music (MUSC 0550) for course description. Prerequisite: MUSC 0550 or permission of the instructor.

Spr MUSC0560 S01 25468 Th 1:00-2:20(10) (L. Wang)
Spr MUSC0560 S02 25467 M 10:30-11:50(09) (M. Steinbach)

MUSC 0570. Jazz and Pop Harmony.
For students with knowledge of rudiments of music, including scales, intervals, key signatures, rhythm and meter. Keyboard skills strongly recommended. Intensive study of chord scales, chord progressions, modulation, voice leading, melody writing, harmonization, reharmonization, chord symbols, and lead sheet construction. Lab sessions will focus on ear training, keyboard exercises, and sight singing. Emphasis will be on the vocabulary of jazz theory and the repertoire will be American popular song.

Spr MUSC0570 S01 25185 Th 10:30-11:50(09) (E. Tomassi)
MUSC 0600. Chorus.
Half credit each semester. A practical study of choral literature, techniques, and performance practice from Gregorian chant to the present, offered through rehearsals, sectionals, and performance. Enrollment is by audition, based on voice quality, experience, and music-reading ability. Instructor permission required.
Fall MUSC0600 S01 16771 MW 6:30-8:20PM (L. Jodry)
MUSC 0601. Chorus.
See Chorus (MUSC 0600) for course description.
Spr MUSC0601 S01 25512 MW 6:30-8:20PM (L. Jodry)

MUSC 0610. Orchestra.
Half credit each semester. A practical study of the orchestra repertory from Bach to the present, offered through coaching, rehearsals, and performances. Enrollment is by audition. Students will be notified of audition results within the first seven days of the semester. Restricted to skilled instrumentalists. May be repeated for credit.
Fall MUSC0610 S01 16772 TTh 7:15-9:45PM (P. Phillips)

MUSC 0611. Orchestra.
See Orchestra (MUSC 0610) for course description.
Spr MUSC0611 S01 25513 TTh 7:15-9:45PM (P. Phillips)

MUSC 0620. Wind Symphony.
Half credit each semester. A practical study of the wind band repertory from Mozart to the present, offered through coaching, rehearsals, and performances. Enrollment is by audition. Restricted to skilled instrumentalists. Instructor permission required.
Fall MUSC0620 S01 16776 W 6:00-8:20PM (M. McGarrell)
Fall MUSC0620 S01 16776 M 6:00-7:20 (M. McGarrell)

MUSC 0621. Wind Symphony.
See Wind Symphony (MUSC 0620) for course description.
Spr MUSC0621 S01 25514 W 6:00-8:20PM (M. McGarrell)
Spr MUSC0621 S01 25514 M 6:00-7:20 (M. McGarrell)

MUSC 0630. Jazz Band.
Half credit each semester. A practical study of jazz from the 1920s to the present through coaching, rehearsals, and performances. Seminars on arranging, ear training, and improvisation are conducted for interested students but the focus is on performance. Enrollment is by audition. Restricted to skilled instrumentalists and vocalists. Instructor permission required.
Fall MUSC0630 S01 16778 Th 6:10-7:20 (M. McGarrell)
Fall MUSC0630 S01 16778 M 7:30-8:50PM (M. McGarrell)
Fall MUSC0630 S02 16779 T 8:00PM-9:20PM (M. McGarrell)
Fall MUSC0630 S03 16780 W 2:00-3:20 (M. McGarrell)
Fall MUSC0630 S04 16781 W 4:00-5:20 (M. McGarrell)
Fall MUSC0630 S05 16782 F 4:00-5:20 (M. McGarrell)

MUSC 0640. Ghanaian Drumming and Dancing Ensemble.
A dynamic introductory course on drumming, dancing, and singing of Ghana and the diaspora. Students learn to perform diverse types of African music, including Ewe, Akan, Ga, and Dagomba pieces on drums, bells, and shakers. No prerequisites. May be repeated for credit. Enrollment limited to 15. Instructor permission required.
Fall MUSC0640 S01 16786 W 5:00-7:20 (M. Obeng)

MUSC 0641. Ghanaian Drumming and Dancing Ensemble.
A dynamic introductory course on drumming, dancing, and singing of Ghana and the diaspora. Students learn to perform diverse types of African music, including Ewe, Akan, Ga, and Dagomba pieces on drums, bells, and shakers. No prerequisites. May be repeated for credit. Enrollment limited to 15. Instructor permission required.
Spr MUSC0641 S01 25515 W 5:00-7:20 (M. Obeng)

MUSC 0642. World Music Ensemble.
This ensemble focuses on global percussive and song traditions, especially those of the African diaspora (based on instructor's vast musical experiences). Here western instrumentalists fuse with traditional musicians from every culture: bongo, gyil, ukulele, tabla, etc. Students will grow and develop their musical skills by learning new techniques on their own instrument, exploring a range of repertoire representing genres such as highlife, reggae, samba, afrobeat, Afro-jazz, and global fusions. There will be unique opportunities to work on improvisation taking influence from Steve Reich, Tito Puente, Randy Weston, Hugh Masekela, Paul Simon, Miriam Makeba, Ghanaba, and Milton Nasimiento. DPLL
Fall MUSC0642 S01 16787 M 7:00-9:00PM (M. Obeng)

MUSC 0645. Brazilian Choro Ensemble.
Half credit each semester. Students will play this popular Brazilian style, which emerged in the late 19th century and is often compared to early jazz. Classes run according to the traditional roda model, a structured jam session where performers read through, improvise upon, and hone their abilities to play familiar tunes. Prior familiarity with choro music not required, but some instrumental expertise is; ability to read notation preferred. Typical instruments include guitar, cavaquinho (Brazilian ukulele), mandolin, flute, and pandeiro (Brazilian tambourine), but others are welcome to participate on instructor approval, as are performers interested in learning these. Enrollment limited to 20.
Fall MUSC0645 S01 16560 M 5:30-7:00 (C. Tucker)

MUSC 0646. Brazilian Choro Ensemble.
Half credit each semester. Students will play this popular Brazilian style, which emerged in the late 19th century and is often compared to early jazz. Classes run according to the traditional roda model, a structured jam session where performers read through, improvise upon, and hone their abilities to play familiar tunes. Prior familiarity with choro music not required, but some instrumental expertise is; ability to read notation preferred. Typical instruments include guitar, cavaquinho (Brazilian ukulele), mandolin, flute, and pandeiro (Brazilian tambourine), but others are welcome to participate on instructor approval, as are performers interested in learning these. Enrollment limited to 20.
Spr MUSC0646 S01 25470 M 5:30-7:00 (C. Tucker)

MUSC 0650. Javanese Gamelan.
Half credit each semester. Instruction, rehearsals, and performances in the gamelan music of Java, on instruments owned by the department. No prerequisites. Enrollment limited to 18 students.
Fall MUSC0650 S01 16563 T 6:00-9:00PM (M. Perlman)

MUSC 0670. Old-Time String Band.
Half course each semester. Instruction and ensemble playing. Music taught by ear. American (southern Appalachian Mountain) traditional music on violin (fiddle), 5-string banjo, mandolin, and guitar. Enrollment limited to 20 students.
Fall MUSC0670 S01 16788 T 7:00-8:50PM ‘To Be Arranged’

MUSC 0680. Chamber Music Performance.
Half credit each semester. The practical study of the literature of chamber music through participation in a small ensemble. Regular rehearsals, coaching by department staff, and performances are required. Enrollment is by audition. Students will be notified of audition results within the first ten days of the semester. Restricted to skilled instrumentalists. May be repeated for credit.
Fall MUSC0680 S01 16789 Arranged (P. Phillips)

Half credit each semester. Restricted to skilled musicians. Openings are limited. Enrollment and re-enrollment is by audition and jury. Lessons are given by consultants to the Applied Music Program. A fee is charged for enrollment. Copies of the Applied Music Program Guidelines giving detailed information are available online at www.brown.edu/music. May be repeated up to four times for credit.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
A history of western European music to Monteverdi’s Orfeo (1607), with
emphasis on the analysis of individual works supported by reading and
listening. Among the major composers studied are Byrd, Dufay, Josquin,
Machaut, and Palestrina. Strongly recommended for freshmen and
 sophomores considering a concentration in music. Limited to students who
can read music. Prerequisite: MUSC 0550 or permission of instructor.
Spr MUSC0910 S01 25164 TTh 9:00-10:20(01) (L. Jodry)

MUSC 1010. Advanced Musicianship I.
Training in advanced musicianship skills relevant to Western art music
from the sixteenth Century to the present, including sight singing, ear
training, score reading, keyboard harmony, improvisation, and musical
transcription. Prerequisite: MUSC 0560 with a grade of B, or permission
of the instructor.
Fall MUSC1010 S01 16530 MWF 2:00-2:50(07) “To Be Arranged”

MUSC 1011. Advanced Musicianship II.
Continuation of MUSC 1010. Prerequisite: MUSC 1010 or permission of
the instructor.
Spr MUSC1011 S01 25183 MWF 2:00-2:50(07) (A. Cole)

MUSC 1030. Tonal Counterpoint.
The contrapuntal techniques of the 18th century with emphasis on music
of Bach. Written exercises in and analysis of several genres including
fugue. Prerequisite: MUSC 0560 or permission of instructor.
Spr MUSC1030 S01 25466 TTh 2:30-3:50(11) (M. Steinbach)

MUSC 1040. Advanced Music Theory.
A study of chromaticism and advanced tonal techniques, with a focus on
19th-century European art music. Assignments will include exercises in
analysis and composition and in-class presentations. Prerequisite: MUSC
0560 with a grade of B, or the equivalent.
Fall MUSC1040 S01 16537 TTh 1:00-2:20(10) (L. Wang)

MUSC 1100. Introduction to Composition.
Composition students begin by using technical resources developed in
their previous theoretical studies. Analysis and discussion of contemporary
music provides examples of alternatives to traditional compositional
strategies, which students integrate into later assignments. A study of
contemporary notational practices and computer-based music notation
and sequencing is also included. Prerequisite: MUSC 0560 or permission
of the instructor. Enrollment limited to 20 students.
Fall MUSC1100 S01 16536 W 3:00-5:30(17) (L. Wang)

MUSC 1110. Seminar in Composition.
This is a seminar-based course with a creative component focusing
on specific compositional techniques such as writing transitions and
motivic development, and writing for specific kinds of ensembles. These
techniques are applicable to all kinds of music, from concert music to
popular genres. The course will also address aesthetic issues, trends and
influences and how they affect living composers’ individual voices. Besides
studying notation repertoire from the concert tradition, we will also examine
approaches to film scoring, improvisation, and environmental sound worlds
outside of the traditional concert hall.
Spr MUSC1110 S01 25221 Th 4:00-6:30(17) (E. Nathan)

MUSC 1210. The Technique of Orchestration.
The study of orchestration includes the ranges, sounds, and idiosyncrasies
of the individual instruments, and the combination of those instruments
into ensemble textures. A series of graduated assignments, including
pieces for solo cello, string quartet, wind quintet, wind ensemble, and
full orchestra, form the basis of this course. Prerequisite: MUSC0560 or
permission of the instructor. Not open to first year students.
Spr MUSC1210 S01 25222 W 3:00-5:30(14) (L. Wang)

MUSC 1250. Sound Design.
This production seminar is a study of techniques and aesthetics used to
create sonic environments and effects that enhance a variety of media
including video, radio and audio art, new media, theater, and installation
art. Technical topics include audio production in multi-channel formats,
advanced audio editing, mixing and synthesis techniques, and audio
system design. Enrollment limited to 12 students. Prerequisite will be
given to students who have completed MUSC 1200. Others will be
evaluated for potential future work in the MEME program (Multimedia and
Electronic Music Experiments) and past participation in MEME. Admission
is determined by an entrance questionnaire completed at the first class
meeting. Prereq: MUSC 1200.
Fall MUSC1250 S01 16538 TTh 2:30-3:50(03) (J. Moses)

This advanced production seminar investigates new ideas and
developments in electronic music from 1990-present. Consists of reading
and discussion of seminal texts in the field, “deep” listening of exemplary
works, and investigating various methods for analysis. Students respond
to the materials with a series of creative composition assignments.
The purpose is to provide a wide variety of perspectives that students integrate
into their own artistic practice. Each student undertakes a term research
project resulting in a paper, presentation and original composition. Open
upper-level undergraduates and graduate students with significant
experience in electronic music. Enrollment limited to 16. By permission
of the instructor. The final class list will be determined based on a
questionnaire handed out on the first day.
Spr MUSC1280 S01 25219 TTh 2:30-3:50(11) (T. Winkler)

MUSC 1500A. Major Masters and Repertoires of Music: Bach.
An examination of the life and work of Bach, including its place in
German church music, views of his contemporaries and explanation of his
manuscript and publishing history.
Fall MUSC1500S01 16532 Th 9:00-10:20(08) (L. Jodry)

MUSC 1700. Score Reading and Conducting.
The art of reading, analyzing, and conducting a musical score. Studies in
clef transposition, ear-training, and structural analysis to develop
the skills needed for full comprehension of an orchestral score. Introduces
the theory and technique of conducting with practice in the art of physical
gesture. Selected repertoire from the Baroque through contemporary
periods are studied and conducted in class. Prerequisite: MUSC 0550 or
permission of the instructor. May be repeated for credit.
Spr MUSC1700 S01 25467 M 3:00-5:30(13) (P. Phillips)

MUSC 1810. Applied Music Program: Instruction in Vocal or
Instrumental Music.
Half credit each semester. Restricted to skilled musicians. Restricted
to skilled musicians demonstrating readiness for an advanced repertory
in their fields. Openings are limited. Enrollment and re-enrollment is
by audition and jury. Lessons are given by consultants to the Applied
Music Program. MUSC 0830, 0840 is prerequisite to this course. A fee
for tuition is charged. Copies of the Applied Music Program Guidelines
giving detailed information are available online at www.brown.edu/
music. Prerequisite: MUSC 0400, or MUSC 0550. MUSC 0560. Written
permission required. May be repeated up to four times for credit.

MUSC 1900. Introduction to Ethnomusicology.
The study of people making music. Ethnographic research and writing
on musical practices; history of ethnomusicology; musical case studies
from around the world highlighting such issues as authenticity, tradition,
commercialism, amateurism, postcolonial politics, and the ethics of
fieldwork.
Fall MUSC1900 S01 16534 TTh 10:30-11:50(13) (K. Miller)
This seminar offers a critical and comparative exploration of American roots music, a category comprising folk, traditional, and popular genres that have been labeled “heritage music” or “ethnic music” in the context of American multiculturalism. Major case studies include African American, Mexican American, and Anglo American traditions/repertoires, with geographical emphases in Appalachia, the city of Chicago, and the state of California. Readings draw on both historical and ethnographic scholarship. Some background coursework in ethnomusicology, cultural anthropology, American Studies, and/or ethnic studies is required.
Prerequisite: MUSC 1900 or ETHN 0500 or instructor permission. DPLL
Spr MUSC1932 S01 25465 TTh 1:00-2:20(10) (K. Miller)

Students with experience in African and related musical traditions perform drumming, dancing, and singing of Ghana and the diaspora. Focus on a more challenging repertoire with emphasis on multi-part, lead, and improvisational playing. Prerequisite: audition. May be repeatable for credit. Instructor permission required. Enrollment limited to 15 students.
Fall MUSC1960 S01 16794 W 7:30-9:50PM (M. Obeng)

Directed undergraduate research for advanced students. Prerequisite: permission of the instructor. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Directed undergraduate research for advanced students. Prerequisite: permission of the instructor. Section numbers vary by instructor. Please see the registration staff for the correct section number to use when registering for this course.

MUSC 2070. Music and Identity.
From 19th-century European nationalism to 20th-century American multiculturalism, people have used music to affirm their identities. Drawing on anthropological and sociological theory, we examine the variety of connections between music and identity in several case studies. We consider the possible contributions of music to cross-cultural understanding, and discuss the ethics of musical border-crossing.
Fall MUSC2070 S01 16543 M 3:00-5:30(15) (M. Perlman)

MUSC 2080B. Ethnography of Popular Music.
This seminar explores ethnographic work on popular music, including scholarship rooted in ethnomusicology, sociology, and performance studies. We will discuss case studies from around the world and will compare contemporary ethnographic research with other approaches to popular music (e.g., Frankfurt School critical theory, Birmingham School cultural studies, and text-oriented popular music studies). Prerequisite: graduate standing or written permission.
Fall MUSC2080B S01 16555 W 3:00-5:30(17) (K. Miller)

MUSC 2080D. Music, Nation, and Nationalism.
This course explores the relation between music and nationhood, as a historically particular form of collective identity, and a dominant political category in late modern societies. Students will work with key texts in the study of nationhood and nationalism, applying them to musical case studies from different world regions. Touching upon art and popular music, these cases will explore the use of nationalist rhetoric to draw citizens into state projects; the appropriation of minority expressions in defining a national self; efforts by postcolonial societies to forge national sentiment into state projects; and the use of music as a tool of national self-affirmation. Prerequisites: some background in ethnomusicology or cultural anthropology, as well as some background in Western music theory and history.
Spr MUSC2080D S01 25224 M 3:00-5:30(13) (C. Tucker)

MUSC 2210. Digital Performance.
A production seminar examining the artistic impact and creative potential of digital media in the context of live performance. Readings and analysis of work examine innovations in performance practice from dance, theatre, performance art and music. Collaborative assignments investigate video projection, sound design and interactive sensor technology, culminating in a final large-scale performance. Permission will be granted based upon a questionnaire given in the first class.
Fall MUSC2210 S01 16588 W 3:00-5:30(17) (T. Winkler)

This seminar will explore the science and aesthetics of designing alternate controllers for musical performance. Topics will include basic electronics and hardware prototyping, instrument construction, theories of gesture, human-computer interface issues, and the challenges of mapping sensor data to meaningful musical parameters. Previous experience with Max/MSP or other real-time programming required. Permission of instructor required.
Spr MUSC2220 S01 25216 M 2:00-5:30 (J. Rovan)

MUSC 2280. Designing-Large-Scale Multimedia Projects.
A production seminar designed for students working on a single, large project in Multimedia and/or Computer Music. The course covers planning and implementation strategies, with group critiques of proposals and works-in-progress. The class structure includes individual lessons for students working on a graduate or undergraduate thesis project. Permission will be granted based upon a questionnaire given in the first class.
Spr MUSC2280 S01 25469 M 3:00-5:30(13) (T. Winkler)

MUSC 2450. Exchange Scholar Program.
Fall MUSC2450 S01 15007 Arranged "To Be Arranged"
Fall MUSC2450 S02 15008 Arranged "To Be Arranged"

MUSC 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall MUSC2970 S01 15009 Arranged "To Be Arranged"
Spr MUSC2970 S01 24030 Arranged "To Be Arranged"

MUSC 2980. Reading and Research.
Directed graduate research. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

MUSC 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall MUSC2990 S01 15010 Arranged "To Be Arranged"
Spr MUSC2990 S01 24031 Arranged "To Be Arranged"

Philosophy

PHIL 0010. The Place of Persons.
We'll concentrate on some fundamental moral and metaphysical issues concerning ourselves as persons: What (if anything) gives us a moral status different from that of other animals? Do we have the sort of free will required for us to be morally responsible for our actions? What makes you one individual person or self at a particular time? What makes you today the same individual person as that obnoxious 5-year-old who went by your name a few years back? WRIT
Fall PHIL0010 S01 24387 MWF 11:00-11:50(04) (F. Ackerman)

PHIL 0030. Skepticism and Knowledge.
What is knowledge? What is the extent and basis of one's knowledge about physical objects, other people, oneself, the future, morality, and religion? WRIT
Fall PHIL0030 S01 15422 TTh 1:00-2:20(10) (F. Ackerman)
PHIL 0050. Aesthetics: Art and Morality
From Plato to the present, the power of the arts to trigger powerful emotions has been seen by some thinkers as a threat to morality, by others as a vital support. This debate raises such issues as whether aesthetic experience is a distinctive kind of experience and whether the creation and reception of art are autonomous activities free from the constraints of morality and politics. Beyond Plato, authors to be read will include such figures as Hume, Mendelssohn, Rousseau, Kant, Schiller, Hegel, Schopenhauer, Ruskin, Tolstoy, Collingwood, Stanley Cavell, Martha Nussbaum, Alexander Nehamas, and others.

Fall PHIL0050 S01 16546 TTh 1:00-2:20(10) (P. Guyer)

PHIL 0060. Modern Science and Human Values
Devoted to the critical study of moral problems that have been raised or affected by modern science and technology, with a particular emphasis on problems in bioethics and environmental ethics. Possible topics include abortion, euthanasia, organ transplantation, pharmaceutical enhancement, animal rights, population control, and climate change. Throughout the course we will keep track of recurring questions about obligations, rights, harm, and justice, as well as the various ways in which philosophers have attempted to answer these questions.

Fall PHIL0060 S01 15453 MWF 1:00-1:50(06) (N. Emery)

PHIL 0110. The Nature of Fiction
This course is concerned with philosophical questions arising from the concept of fiction. Topics will include: What makes a story a fiction? What are fictional characters? Are fictions "created"? Are fictions physical things, like books? How do fictions make us care about things we don’t even believe in? How do fictions affect our moral beliefs. This course will emphasize the identification of the problems and the solutions to them that seemed pressing to these thinkers, especially if such problems seem alien to us.

Fall PHIL0110 S01 24358 TTh 9:00-10:20(01) (A. Bjurman Pautz)

PHIL 0350. Ancient Philosophy
This course will introduce students to the major concerns of Greek philosophy, and how they are addressed by the Presocratics, Plato, Aristotle, and the Stoics. We will have two related ends: historical and critical. On the one hand, we will get clear so far as we are able what it is that these thinkers thought; on the other, it is important to evaluate their arguments. This course will emphasize the identification of the problems and the solutions to them that seemed pressing to these thinkers, especially if such problems seem alien to us.

Fall PHIL0350 S01 15454 MWF 12:00-12:50(12) (M. Gill)

PHIL 0360. Early Modern Philosophy
An introduction to central themes in Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. Major topics include: reason, experience, and knowledge; substance and the nature of the world as it really is; induction, causation, and the origin of our ideas; skepticism, realism, and idealism. Connections are made with the scientific revolution of the 17th century. There will be discussion and advice on ways to approach philosophical reading, research and writing. Students should register for both a section and a conference.

Spring PHIL0360 S01 24369 MWF 11:00-11:50(04) (C. Larmore)

PHIL 0390. Global Justice
Is it unjust that people in some countries have less wealth, worse health, etc., than those in other countries? Does this depend on whether the better off countries partly caused the disparity? Does it depend on whether the worse off are poor, or is it enough that they are relatively worse off? If there are global injustices, what obligations are there, and on whom do they fall, to remedy them? We will study (mostly) recent philosophical work on such questions, including attention to special contexts such as immigration, climate change, poverty, colonialism, secession, intervention, and war.

Spring PHIL0390 S01 24365 MWF 2:00-2:50(07) (D. Estlund)

PHIL 0500. Moral Philosophy
An introduction to ethics, the part of philosophy that is concerned with right and wrong, good and bad, virtue and vice. We will look at some central issues in the field as well as some of the main theories in it. Is an action good or bad because of its anticipated results or regardless of these results? Is it ever right to kill one person to save five? Is relativism true? Is abortion wrong? These would be some of the topics discussed.

Spring PHIL0500 S01 24356 TTh 2:30-3:50(11) (N. Arpaly)

PHIL 0540. Logic
An introduction to perhaps the most fundamental tool of rational thought: deductive logic. Course begins with basic sentential logic, then moves on to deduction, quantification, and prediction. Argumentation and reasoning may also be addressed at times. No previous experience with logic or philosophy is required.

Fall PHIL0540 S01 15455 MWF 10:00-10:50(14) (R. Heck)

PHIL 0850. Introduction to the Philosophy of Language
Discussion of the nature of linguistic meaning and other topics, such as vagueness; metaphor; and language, thought, and culture.

Fall PHIL0850 S01 15432 MWF 11:00-11:50(16) (A. Bjurman Pautz)

PHIL 0880. Ethical Themes in the Contemporary American Short Story
Consideration of contemporary American short stories in terms of their treatment of such philosophical themes as love, loyalty, envy, belief, despair, and charity. Focuses on themes in moral philosophy, rather than themes in social and political philosophy. This course has no prerequisites.

Spring PHIL0880 S01 24355 MWF 2:00-2:50(07) (F. Ackerman)

PHIL 0990F. Perception
 Begins with a reading of some classic works, and then moves on to contemporary work. Topics include: naive realist versus representational theories of sensory experience, the possibility that sensory experience is massively illusory (so that we already occupy a kind of "virtual reality"), the role of the brain in shaping sensory experience, and the alleged foundational role of sensory experience in knowledge. The focus will be on vision but we will also discuss other sense-modalities.

Fall PHIL0990F S01 15456 M 3:00-3:50(15) (A. Pautz)

PHIL 0990T. Paradox and Infinity
This course will focus on several important paradoxes that arise within philosophy and mathematics. We will use these paradoxes to investigate central issues in metaphysics, the philosophy of language, decision theory, physics, mathematics, and logic. Among the paradoxes we will discuss are Zeno’s paradoxes of space, time, and motion; the paradoxes of set theory; the paradoxes of truth and reference; the sorites paradox; and paradoxes of rational action and rational belief. Enrollment limited to 20.

Fall PHIL0990T S01 16400 Th 4:00-5:30(04) (J. Schechter)

PHIL 0990X. Conditionals.
In this seminar we will look at different theories of what "if" means. Is it a truth-functional connective, like the material conditional used in logic? Do sentences of the form "If F, then Q" even have truth conditions? Some logic will be very helpful; some familiarity with philosophy of language also helpful. Enrollment limited to 20 juniors and seniors.

Spring PHIL0990X S01 24362 Th 4:00-5:30(17) (J. Dreier)

PHIL 0991J. Philosophical Themes in Malory's Le Morte D'Arthur
In this seminar, we will explore how Sir Thomas Malory’s Le Morte D’Arthur illuminates various philosophical issues involving intelligence, rationality, mercy, pride, self-control, dignity, self-deception, pity, envy, moral perfection, death, and love. Readings will include all of Le Morte D’Arthur as well as philosophical writings on the topics mentioned. You may read Malory in a modernized-spelling version if you cannot read Middle English. In order to include students with varied backgrounds and interests, this seminar has no prerequisites.

Spring PHIL0991J S01 24514 M 3:00-5:30(13) (F. Ackerman)

PHIL 0991L. Scepticism, Ancient and Modern: Sextus, Descartes, Hume.
Ancient Sceptics had a great series of arguments for undermining claims to knowledge and (some say) belief. (Honey tastes sweet to some, but bitter to people with a fever. ‘Since everything is relative, we shall suspend judgement as to how things are independently’. And many more.) But, some say, it was only with Descartes that philosophers put in question the very existence of an independent world. We shall explore what kind of life the life of a sceptic may be; what kinds of fragmentation of the world may (or may not) result; and some differences between older and newer forms of scepticism.

Fall PHIL0991L S01 15620 Th 10:30-11:50(13) (J. Broackes)
PHIL 1280. History of Ethics
The project of British moral philosophers after Hobbes was to rebut what they all perceived as an ethics based solely on enlightened self-interest with one based on disinterested concern for others. We will examine the early responses to Hobbes of Richard Cumberland and the Earl of Shaftesbury; the moral sense theorists Francis Hutcheson, Joseph Butler, David Hume, Lord Kames, and Adam Smith; and the rationalists Ralph Cudworth and Samuel Clarke. This course is recommended preparation for PHIL 1290, Kant’s Practical Philosophy.
Spr PHIL1280 S01 25172 TTh 1:00-2:20(10) (P. Guyer)

PHIL 1400. Ethics in the Novel.
Consideration of novels in terms of their treatment of such philosophical themes as death, courage, faith, betrayal, responsibility to others, and mercy. Focuses on themes in moral philosophy rather than themes in social and political philosophy. The course deals with contemporary American novels and also with Malory. No pre-requisites. WRIT
Fall PHIL1400 S01 15425 TTh 2:30-3:50(03) (F. Ackerman)

PHIL 1520. Consciousness.
Topics will include: (i) the different features of various types of consciousness; (ii) dualist, physicalist, and representationalist theories of experience; (iii) the nature of pain and other bodily sensations; (iv) the nature of conscious thought; (v) the qualitative dimension of perception; (vi) introspection; (vii) the roles of attention and working memory in perceptual consciousness; (viii) blindsight, attentional blindness, hemineglect, and related phenomena; (ix) the unconscious; and (x) what it is for a state of consciousness to be unified.
Fall PHIL1520 S01 16547 MWF 1:00-1:50(06) (C. Hill)

PHIL 1590. Philosophy of Science.
Some very general, basic questions concerning science. Can evidence justify belief in theories which go beyond the evidence? What is the nature of good scientific reasoning? Is there a single scientific method? What is a scientific explanation? Does science reveal truths about unobservable reality, or merely tell us about parts of the world we can measure directly? WRIT
Fall PHIL1590 S01 15511 MWF 10:30-11:50(13) (D. Christensen)

PHIL 1650. Moral Theories.
A systematic examination of the main alternative normative moral theories: consequentialism; moral rights; moral duties; moral virtues. Focuses on the principal issues in the formulation of the different theories, on the main points of conflict between them, and on the critical evaluation of each. Readings are drawn mainly from contemporary work in moral philosophy.
Fall PHIL1650 S01 15426 MWF 2:00-2:50(07) (N. Arpaly)

PHIL 1660. Metaphysics.
A survey of some major topics in metaphysics, with a particular focus on radical metaphysical arguments – arguments that call into question our most basic beliefs about the world. Topics covered may include: What is personal identity? Does personal identity matter? Do personal identity and consciousness matter? Is there right and wrong and objective value? Is there free will? Are there any good arguments for God? Prerequisite: at least one course in philosophy (2 or more preferred).
Spr PHIL1660 S01 24364 TTh 1:00-2:20(10) (N. Emery)

PHIL 1670. Time.
This course will survey the major topics in the philosophy of time from Augustine’s Confessions and the Leibniz-Clairecorrespondence to contemporary philosophical work on the possibility of time travel. Although the main focus will be on philosophical theories of time, and students will be learning to read, think, and write like philosophers, we will also consider the portrayal of time in various works of fiction, and the role of time in various scientific theories. WRIT
Spr PHIL1670 S01 24363 TTh 10:30-11:50(09) (N. Emery)

PHIL 1750. Epistemology.
We’ll concentrate on several issues involving knowledge and rational belief. What is knowledge, and how does it relate to rational or justified belief? Does a person’s knowing something depend on non-evidential factors such as the practical importance of the person’s being correct? Does the justification of a person’s belief depend just on facts internal to the person—or might it depend on her environment? And what can we learn from thinking about the skeptical position which claims that we’re not justified in believing even the most ordinary things about the world around us? WRIT
Fall PHIL1750 S01 15510 TTh 2:30-3:50(03) (D. Christensen)

PHIL 1770. Philosophy of Mind.
Questions concerning the nature of mentality and its relation to the body. Selections from the following topics: mind and behavior, mind as the brain, mind as a computing machine, thought and language, action and mental causation, intentionality and consciousness. Prerequisite: at least one course in philosophy (2 or more preferred).
Spr PHIL1770 S01 24371 MWF 10:00-10:50(03) (A. Pautz)

PHIL 1880. Advanced Deductive Logic.
This course provides an introduction to the metatheory of first-order logic. We will prove the completeness of first-order logic. We then move on to the major “limitative” results, including the undecidability of first-order logic, the Gödel incompleteness theorems, and the undefinability in arithmetic of arithmetical truth. Prerequisite: PHIL 0540 or instructor’s permission.
Spr PHIL1880 S01 24374 MWF 12:00-12:50(05) (J. Schechter)

PHIL 1890B. Wittgenstein.
This course will focus on the Philosophical Investigations and its treatment of various questions in the philosophy of language and the philosophy of mind. Some attention will also be given to other writings of the later Wittgenstein. Prerequisite: Two courses in philosophy.
Spr PHIL1890B S01 24370 W 3:00-3:50(14) (C. Larmore)

An elective for students with at least six previous courses in philosophy. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

An elective for students writing a thesis. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

PHIL 2010C. Time and Modality.
This seminar will explore the connections between philosophy of time and philosophy of modality. Questions we will consider include: What are merely possible worlds? What are past and future times? Do we have modal parts? Do we have temporal parts? How do we gain knowledge about what is merely possible? How do we gain knowledge about what is past and what is future? Should we care about what has happened in the past? And should we care about what could have happened?
Fall PHIL2010C S01 15621 W 5:40-6:10PM (N. Emery)

PHIL 2020P. Color and its Place in Nature.
Focuses on the nature and status of color, an instance of the ancient puzzle of appearance vs. reality. We will begin by examining contemporary realist views of color (Armstrong, Byrne and Hilbert, Tye). Then we will take a look at idealist approaches (Chalmers, Pautz). Finally we will look at “relativist views” (Jonathan Cohen, Jack Spencer). Although the focus will be on color, we will also sometimes discuss other sensible properties (audible qualities, olfactory qualities, etc.)
Fall PHIL2020P S01 15622 W 3:00-3:50(17) (A. Pautz)

PHIL 2030A. Moral Psychology.
This seminar will examine in depth some problems associated with morality, rationality, and the human psyche. Possible topics: acting for reasons, moral responsibility, practical reasoning, moral character, love, modesty, being too good, moral luck, desire, weakness of will. Undergraduates require instructor permission to enroll.
Fall PHIL2030A S01 15844 W 3:00-5:30(17) (N. Arpaly)
PHIL 2060L. Introspection.
Philosophers and psychologists held introspection in low esteem for much of the twentieth century, and post-modern novelists tended to share this skepticism. But we are now seeing a renaissance. For the first time there are relatively concrete theoretical proposals about how introspection actually works, empirical methods of testing such proposals, neuroscientific studies of underlying mechanisms, and patient, responsible debates about the scope and accuracy of introspection. After a brief look at the history of the subject, we will consider recent works by such authors as Schwitzgebel, Byrne, Hurburt, Gopnik, Carruthers, Wu, and Fernyhoth.
Spr PHIL2060L S01 25392 Th 4:00-6:30(17) (C. Hill)

PHIL 2080L. Twentieth-Century Aesthetics.
This seminar will approach twentieth-century aesthetics through seminal works of the 1930s, including those by John Dewey, Martin Heidegger, Walter Benjamin, R.G. Collingwood, and Ludwig Wittgenstein. The focus will be on the relation between art and forms of life (to borrow the terminology of the later Wittgenstein).
Spr PHIL2080L S01 25391 Th 3:00-5:30(14) (P. Guyer)

PHIL 2100M. Topics in Political Philosophy.
Content will be determined as the term approaches. Please contact the instructor if you would like more information.
Spr PHIL2100M S01 25391 Th 4:00-6:30(17) (D. Estlund)

PHIL 2110L. Substance, Ancient and Modern.
What exists? What entities are fundamental and for what reasons? Aristotle devoted the Categories and central books of the Metaphysics to these questions. 17th-century philosophers, while rejecting much of Aristotle's world-picture, in many cases kept a place for a notion of Substance. In Descartes it is a crucial part of his dualism; Locke (in early drafts for the Essay) rejects the notion--much as Hume will do--but later finds that he cannot do without it. We will do a careful reading of central parts of Aristotle's Metaphysics, and then parts of Descartes, Locke, Hume and others.
Spr PHIL2110L S01 24515 W 5:40-8:10PM (J. Broackes)

PHIL 2140B. Recent Works in Epistemology.
In this seminar, we will discuss contemporary work in epistemology.
Fall PHIL2140B S01 15623 Th 4:00-6:30(04) (J. Schechter)

PHIL 2150L. Plato's Theaetetus.
In this seminar, we will discuss Plato's Theaetetus, his investigation of knowledge, and associated topics, including relativism, perception, true and false judgment, and accounts, with a view to understanding how Plato distinguishes knowledge from true belief. Open to graduate students only; others may enroll with instructor permission.
Fall PHIL2150L S01 15846 Th 4:00-6:30(04) (M. Gill)

PHIL 2190H. Theories of Self-Consciousness in Classical German Philosophy (Kant, Fichte, Hegel).
Theories of consciousness and self-consciousness play an important role in the philosophical systems of the main representatives of classical German philosophy. In particular Kant, Fichte and Hegel share the conviction that without a convincing understanding of consciousness and self-consciousness a coherent conception of both mental and physical reality is unattainable. The aim of the course is to look more closely into their approaches to this topic and to discuss critically the metaphysical, epistemological and psychological claims these philosophers connect with their respective views concerning consciousness and self-consciousness.
Spr PHIL2190H S01 24388 T 4:00-6:30(16) (R. Horstmann)

PHIL 2200. Graduate Proseminar.
Will cover classics of philosophy from the end of the 19th century to the end of the 20th; including ethics as well as metaphysics, epistemology and philosophy of language.
Fall PHIL2200 S01 15436 TTh 9:00-10:20(08) (J. Broackes)
Spr PHIL2200 S01 24357 TTh 6:40-8:00PM(18) (N. Arpaly)

PHIL 2450. Exchange Scholar Program.
Fall PHIL2450 S01 15013 Arranged "To Be Arranged"
Fall PHIL2450 S02 15014 Arranged "To Be Arranged"
Spr PHIL2450 S01 24034 Arranged "To Be Arranged"

PHIL 2700. Third Year Workshop.
Students will receive training and practice in writing papers for publication in philosophy journals. Each student will complete a paper that has significantly greater scope and depth than a normal seminar paper. The paper will normally have some relevance to an envisioned dissertation, but there will be more emphasis on the quality of work than on relevance to future projects.
Spr PHIL2700 S01 24372 MW 9:00-9:50(02) (A. Pautz)

PHIL 2800. Dissertation Workshop.
No description available. Course for graduate students during their 4th year or above.
Fall PHIL2800 S01 15457 MW 9:00-9:50(17) (J. Schechter)
Spr PHIL2800 S01 24360 MW 9:00-9:50(02) (D. Christensen)

PHIL 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall PHIL2970 S01 15015 Arranged "To Be Arranged"
Spr PHIL2970 S01 24035 Arranged "To Be Arranged"

PHIL 2980. Research in Philosophy.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

PHIL 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall PHIL2990 S01 15016 Arranged "To Be Arranged"
Spr PHIL2990 S01 24036 Arranged "To Be Arranged"

PHIL XLIST. Courses of Interest to Philosophy Concentrators.

Physics

PHYS 0030. Basic Physics.
Survey of mechanics for concentrators in sciences other than physics--including premedical students or students without prior exposure to physics who require a less rigorous course than PHYS 0050, PHYS 0060. Employs the concepts of elementary calculus but little of its technique. Lectures, conferences, and laboratory. Six hours of attendance. Recommended: MATH 0090 or MATH 0100.
Fall PHYS0030 S01 15173 MWF 11:00-11:50(16) "To Be Arranged"
Fall PHYS0030 S02 15174 MW 12:00-12:50(12) "To Be Arranged"

PHYS 0040. Basic Physics.
Survey of electricity, magnetism, optics, and modern physics for concentrators in sciences other than physics--including premedical students or students without prior exposure to physics who require a less rigorous course than PHYS 0050, PHYS 0060. Employs the concepts of elementary calculus but little of its technique. Lectures, conferences, and laboratory. Recommended: MATH 0090 or MATH 0100.
Fall PHYS0040 S01 24165 MW 11:00-11:50(04) "To Be Arranged"
Spr PHYS0040 S02 24166 MW 12:00-12:50(05) "To Be Arranged"

An introduction to Newtonian mechanics that employs elementary calculus. Intended for science concentrators. Potential physics concentrators, who do not have adequate preparation for PHYS 0070, may enroll, but are urged to continue with PHYS 0160 rather than PHYS 0060. Lectures, conferences and laboratory. Six hours of attendance. Recommended: MATH 0090 or MATH 0100.
Fall PHYS0050 S01 15179 MW 8:30-9:50(01) "To Be Arranged"

An introduction to the principles and phenomena of electricity, magnetism, optics, and the concepts of modern physics. Recommended for those who wish to limit their college physics to two semesters but seek a firm grounding in the subject, including but not limited to those with some previous knowledge of physics. Lectures, conferences, and laboratory. Six hours of attendance. Prerequisite: PHYS 0050. Recommended: MATH 0100.
Spr PHYS0060 S01 24167 MW 8:30-9:50(02) "To Be Arranged"
A mathematically more rigorous introduction to Newtonian mechanics than PHYS 0050. For first-year students and sophomores who have studied physics previously and have completed a year of calculus. Lectures, conferences, and laboratory. Six hours of attendance. Prerequisites: high school physics and calculus or written permission.

Fall PHYS0070 S01 15180 MWF 9:00-9:50(01) "To Be Arranged"

PHYS 0160. Introduction to Relativity and Quantum Physics.
A mathematically rigorous introduction to special relativity and quantum mechanics. The second course in the three-semester sequence (PHYS 0470 being the third) for those seeking the strongest foundation in physics. Also suitable for students better served by an introduction to modern physics rather than electromagnetism. Lectures, conferences, and laboratory. Six hours of attendance. Prerequisite: PHYS 0070 or 0050. Recommended: MATH 0180 or 0200.

Spr PHYS0160 S01 24168 MWF 9:00-9:50(02) "To Be Arranged"

PHYS 0220. Astronomy.
An introduction to basic ideas and observations in astronomy, starting with the observed sky, coordinates and astronomical calendars and cycles, the historical development of our understanding of astronomical objects. Particular emphasis is placed on the properties of stars, galaxies, and the Universe as a whole, including the basic ideas of cosmology. The material is covered at a more basic level than PHYS 0270. Knowledge of basic algebra and trigonometry is required, but no experience with calculus is necessary. The course includes evening laboratory sessions.

Spr PHYS0220 S01 24169 TTh 10:30-11:50(09) "To Be Arranged"

PHYS 0270. Introduction to Astronomy.
A complete survey of basic astronomy, more rigorous than is offered in PHYS 0220. Requires competence in algebra, geometry, trigonometry, and vectors and also some understanding of calculus and classical mechanics. Laboratory work required. This course or an equivalent required for students concentrating in astronomy. The course includes conferences and evening laboratory sessions.

Fall PHYS0270 S01 15181 TTh 1:00-2:20(10) "To Be Arranged"

PHYS 0470. Electricity and Magnetism.
Electric and magnetic fields. Motion of charged particles in fields. Electric and magnetic properties of matter. Direct and alternating currents. Maxwell’s equations. Laboratory work. Prerequisites: PHYS 0040, 0060, or 0160; and MATH 0180, 0200 or 0350. Labs meet every other week.

Fall PHYS0470 S01 15182 MWF 10:00-10:50(14) "To Be Arranged"

Dynamics of particles, rigid bodies, and elastic continua. Normal modes. Lagrangian and Hamiltonian formulations. Prerequisites: PHYS 0070, 0160 or 0050, 0060 and MATH 0180 or 0200; or approved equivalents.

Spr PHYS0500 S01 24170 MWF 10:00-10:50(03) "To Be Arranged"

PHYS 0560. Experiments in Modern Physics.
Introduction to experimental physics. Students perform fundamental experiments in modern quantum physics, including atomic physics, nuclear and particle physics, and condensed matter physics. Visits to research labs at Brown acquaint students with fields of current research. Emphasizes laboratory techniques, statistics, and data analysis. Three lecture/discussion hours and three laboratory hours each week. Required of all physics concentrators. Prerequisites: PHYS 0070, 0160 or 0050, 0060; 0470; WRIT

Spr PHYS0560 S01 24171 MWF 11:00-11:50(04) "To Be Arranged"

PHYS 0720. Methods of Mathematical Physics.
This course is designed for sophomores in physical sciences, especially those intending to take sophomore or higher level Physics courses. Topics include linear algebra (including linear vector spaces), Fourier analysis, ordinary and partial differential equations, complex analysis (including contour integration). Prerequisites: PHYS 0060 or 0160, MATH 0180, 0200 or 0350, or consent of the instructor.

Fall PHYS0720 S01 15183 MWF 11:00-11:50(16) "To Be Arranged"

An introduction to the principles of quantum mechanics and their use in the description of the electronic, thermal, and optical properties of materials. Primarily intended as an advanced science course in the engineering curriculum. Open to others by permission. Prerequisites: ENGN 0040, APMA 0340 or equivalents.

Fall PHYS0790 S01 15184 TTh 9:00-10:20(08) "To Be Arranged"

PHYS 1170. Introduction to Nuclear and High Energy Physics.
A study of modern nuclear and particle physics, with emphasis on the theory and interpretation of experimental results. Prerequisites: PHYS 1410, 1420 (may be taken concurrently), or instructor permission.

Spr PHYS1170 S01 24172 MWF 2:00-2:50(07) "To Be Arranged"

PHYS 1250. Stellar Structure and the Interstellar Medium.
This class is an introduction to the physics of stars and their environment. The course covers the fundamental physics that set the physical properties of stars, such as their luminosity, size, spectral properties and how these quantities evolve with time. In addition, it includes a study of the physics that takes place in the gaseous environment surrounding stars, the Interstellar Medium (ISM). The ISM is very important because it contains a wealth of information on the evolutionary history of galaxies, their composition, formation and future. Prerequisites: PHYS 0270, PHYS 0500, or instructor permission. PHYS 1530 (perhaps taken concurrently) is strongly recommended but not required.

Spr PHYS1250 S01 24173 MWF 1:00-1:50(06) "To Be Arranged"

PHYS 1270. Extragalactic Astronomy and High-Energy Astrophysics.
This course provides an introduction to the astrophysics of galaxies, their structure and evolution, with an emphasis on physical introduction of the observations. Underlying physics concepts such as radiative transfer, nuclear reactions and accretion physics will be introduced. Intended for students at the junior level. Prerequisites: PHYS 0270 and PHYS 0470, and either MATH 0190 or MATH 0200, or instructor permission. WRIT

Fall PHYS1270 S01 15185 MWF 1:00-1:50(06) "To Be Arranged"

PHYS 1410. Quantum Mechanics A.
A unified treatment of quanta, photons, electrons, atoms, molecules, matter, nuclei, and particles. Quantum mechanics developed at the start and used to link and explain both the older and newer experimental phenomena of modern physics. Prerequisites: PHYS 0500 and 0560; and MATH 0520, 0540 or PHYS 0720; or approved equivalents.

Fall PHYS1410 S01 15186 MWF 9:00-9:50(01) "To Be Arranged"

PHYS 1420. Quantum Mechanics B.
See Quantum Mechanics A. (PHYS 1410) for course description.

Spr PHYS1420 S01 24174 MWF 9:00-9:50(02) "To Be Arranged"

PHYS 1510. Advanced Electromagnetic Theory.
Maxwell’s laws and electromagnetic theory. Electromagnetic waves and radiation. Special relativity. Prerequisites: PHYS 0470; and MATH 0180, 0200, or 0350; or approved equivalents.

Fall PHYS1510 S01 15187 TTh 2:30-3:50(03) "To Be Arranged"

PHYS 1530. Thermodynamics and Statistical Mechanics.
The laws of thermodynamics and heat transfer. Atomic interpretation in terms of kinetic theory and elementary statistical mechanics. Applications to physical problems. Prerequisites: MATH 0180 or 0200 or 0350. Corequisite: PHYS 1410.

Fall PHYS1530 S01 15188 TTh 10:30-11:50(13) "To Be Arranged"

PHYS 1560. Modern Physics Laboratory.
A sequence of intensive, advanced experiments often introducing sophisticated techniques. Prerequisites: PHYS 0470, 0500 and 0560; and MATH 0520, 0540 or PHYS 0720; or approved equivalents. WRIT

Spr PHYS1560 S01 24175 TTh 9:00-10:20(01) "To Be Arranged"
PHYS 1600. Computational Physics.
This course provides students with an introduction to scientific
computation, primarily as applied to physical science problems. It
will assume a basic knowledge of programming and will focus on
how computational methods can be used to study physical systems
complementing experimental and theoretical techniques. Prerequisites:
PHYS 0070, 0160 (or 0050, 0060) and 0470 (or ENGN 0510); MATH 0180
or 0200 or 0350; the ability to write a simple computer program in Fortran,
Matlab, C or C++, WRIT
Spr PHYS1600 S01 24176 MW 8:30-9:50(02) 'To Be Arranged'

PHYS 1610. Biological Physics.
Introduction on structures of proteins, nucleotides, and membranes;
electrostatics and hydration; chemical equilibrium; binding affinity
and kinetics; hydrodynamics and transport; cellular mechanics and
motions; biophysical techniques including sedimentation, electrophoresis,
microscopy and spectroscopy. Suitable for undergraduate science and
engineering majors and graduate students with limited background in life
science. Prerequisites: MATH 0180.
Fall PHYS1610 S01 15189 TTh 2:30-3:50(03) 'To Be Arranged'

PHYS 1989. Senior Conference Course.
Preparation of thesis project. Required of candidates for the degree
of bachelor of science with a concentration in physics. Section numbers vary
by instructor. Please check Banner for the correct section number and
CRN to use when registering for this course.

PHYS 2010. Techniques in Experimental Physics.
No description available.
Fall PHYS2010 S01 15190 W 3:00-5:30(17) 'To Be Arranged'
Spr PHYS2010 S01 24177 W 3:00-5:30(14) 'To Be Arranged'

PHYS 2030. Classical Theoretical Physics I.
No description available.
Fall PHYS2030 S01 15191 TTh 9:00-10:20(08) 'To Be Arranged'

PHYS 2040. Classical Theoretical Physics II.
No description available.
Spr PHYS2040 S01 24178 TTh 10:30-11:50(09) 'To Be Arranged'

PHYS 2050. Quantum Mechanics.
No description available.
Fall PHYS2050 S01 15192 MWF 10:00-10:50(14) 'To Be Arranged'

PHYS 2060. Quantum Mechanics.
No description available.
Spr PHYS2060 S01 24179 MW 10:00-10:50(03) 'To Be Arranged'

PHYS 2070. Advanced Quantum Mechanics.
No description available.
Fall PHYS2070 S01 15193 TTh 1:00-2:20(10) 'To Be Arranged'

PHYS 2100. General Relativity and Cosmology.
Given every other year.
Spr PHYS2100 S01 24180 TTh 1:00-2:20(10) 'To Be Arranged'

PHYS 2140. Statistical Mechanics.
No description available.
Spr PHYS2140 S01 24181 TTh 1:00-2:20(10) 'To Be Arranged'

PHYS 2300. Quantum Theory of Fields I.
No description available. Instructor permission required.
Fall PHYS2300 S01 15194 TTh 10:30-11:50(13) 'To Be Arranged'

PHYS 2410. Solid State Physics I.
No description available.
Fall PHYS2410 S01 15195 MWF 12:00-12:50(12) 'To Be Arranged'

PHYS 2430. Quantum Many Body Theory.
No description available.
Fall PHYS2430 S01 15196 MWF 2:00-2:50(07) 'To Be Arranged'

PHYS 2450. Exchange Scholar Program.
Fall PHYS2450 S01 15019 Arranged 'To Be Arranged'
Spr PHYS2450 S01 24038 Arranged 'To Be Arranged'

PHYS 2600. Computational Physics.
This course provides students with an introduction to scientific
computation at the graduate level, primarily as applied to physical science
problems. It will assume a basic knowledge of programming and will focus
on how computational methods can be used to study physical systems
complementing experimental and theoretical techniques. Prerequisites:
PHYS 2030, 2050, 2140; the ability to write a simple computer program in
Fortran, Matlab, C or C++; WRIT
Spr PHYS2600 S01 24184 MW 8:30-9:50(02) 'To Be Arranged'

PHYS 2630. Biological Physics.
The course is the graduate version of Phys 1610, Biological Physics. The
topics to be covered include structure of cells and biological molecules;
diffusion, dissipation and random motion; flow and friction in fluids;
entropy, temperature and energy; chemical reactions and self-assembly;
solution electrostatics; action potential and nerve impulses. The graduate
level course has additional pre-requisites of Phys 0470 and 1530, or
equivalents. It requires homework assignments at the graduate level.
The final grades will be assigned separately from those who take the
course as Phys 1610, although the two groups may be taught in the same
classroom.
Fall PHYS2630 S01 15197 TTh 2:30-3:50(03) 'To Be Arranged'

PHYS 2710. Seminar in Research Topics.
Instruction via reading assignments and seminars for graduate students
on research projects. Credit may vary. Section numbers vary by instructor.
Please check Banner for the correct section number and CRN to use when
registering for this course.

PHYS 2711. Seminar in Research Topics.
See Seminar In Research Topics (PHYS 2710) for course description.
Section numbers vary by instructor. Please check Banner for the correct
section number and CRN to use when registering for this course.

PHYS 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are
paying the registration fee to continue active enrollment while preparing for
a preliminary examination.
Fall PHYS2970 S01 15020 Arranged 'To Be Arranged'
Spr PHYS2970 S01 24039 Arranged 'To Be Arranged'

PHYS 2980. Research in Physics.
Section numbers vary by instructor. Please check Banner for the correct
section number and CRN to use when registering for this course.

PHYS 2981. Research in Physics.
Section numbers vary by instructor. Please check Banner for the correct
section number and CRN to use when registering for this course.

PHYS 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are
paying the registration fee to continue active enrollment while preparing a
thesis.
Fall PHYS2990 S01 15021 Arranged 'To Be Arranged'
Spr PHYS2990 S01 24040 Arranged 'To Be Arranged'

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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Political Science

POLS 0010. Introduction to the American Political Process.
This course is designed to be an introduction to the American political process, broadly defined. We will cover topics including but not limited to: Constitution, Federalism, Federal Budget, Congress, Presidency, Bureaucracy, Judiciary, Civil Rights, Civil Liberties, Public Opinion, Media, Interest Groups, Political Parties, Campaigns, Elections, and Participation. Fall

Spr POLS0110 S01 244421 TTh 1:00-2:20(10) (A. Gouveitch)

POLS 0110. Introduction to Political Thought.
What is justice? What is freedom? What is the basis of political authority? What is the nature of the best regime? Why should we obey the laws? When may we legitimately resist? These and other perennial questions of political life are explored. Readings include Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Marx, and J.S. Mill. WRIT

Fall POLS0100 S01 15540 MWF 12:00-12:50(12) (R. Arenberg)

POLS 0200. Introduction to Comparative Politics.
Introduces students to the sub-field of comparative politics or politics within states. Topics include types of regimes (i.e., democratic, authoritarian-with-adjectives, totalitarian); transitions to democracy; collapse of democratic regimes; democratizing, revolutionary and ethnic challenges to the state; and globalization. The course also pays attention to modes of analysis in comparative politics. Cases will be drawn from various regions, including Western and Eastern Europe, Asia, Africa, the Middle East, and Latin America.

Spr POLS0200 S01 244322 TTh 10:30-11:50(09) (P. Singh)

POLS 0400. Introduction to International Politics.
This course provides a basic introduction to the central theoretical perspectives and debates in international relations. The second part of the course applies these models to current problems in international relations, including globalization, state failure, humanitarian intervention, NGOs, terrorist networks, environmental issues, and possible future change in international politics.

Fall POLS0400 S01 15478 TTh 1:00-2:20(10) (J. Branch)

POLS 0820L. Philosophy of the American Founding.
In framing our political system in the Constitution, who did the Founders rely on for their theoretical framework? In this course, we will explore the works of Montesquieu, Adams, Franklin, Jefferson, Madison, Hamilton, and other contributors to the Constitution. Enrollment limited to 20 first year students. FYS

Spr POLS0820L S01 244448 W 3:00-5:30(14) (N. Tannenwald)

POLS 0820S. Capitalism For and Against.
What is capitalism? What are its defining traits and institutions. The roles of the market and the state on individual rights and social responsibilities be balanced? What are capitalism's strengths and weaknesses? Are capitalist societies or other types of systems the best way to achieve justice, promote excellence, and provide freedom, happiness, and material well-being? What are the coherent criticisms of and alternatives to capitalism? This course will study some of the seminal philosophical arguments about capitalism, focusing especially on Smith, Locke, Rousseau, Marx, and Hayek. Enrollment limited to 20 freshmen and sophomores.

Fall POLS0820S S01 15544 F 3:00-5:30(11) 'To Be Arranged'

POLS 0820T. Women's Work and Welfare in Global Perspective.
The seminar looks at how welfare systems structure women's participation in the workplace, family and society, including: women's roles in domestic economies; migration flows from poor to rich states, gendered divisions of labor; human trafficking; and pro-natalist responses to population decline. Attention is devoted to policies that support women and families, including welfare, work-and-family reconciliation; micro-financing, conditional income support programs; and the growing role of women's and non-governmental organizations in welfare policy. Cases are drawn from Europe, Latin America, Asia, Russia and the United States. FYS

Fall POLS0820T S01 15516 E 4:00-6:30(12) (L. Cook)

POLS 0820U. Drug War Politics.
This seminar examines the politics, practice, and consequences of government efforts to regulate mind-altering substances since the early 20th century. Although much of the focus is on the contemporary United States and Latin America, the coverage is broadly historical, comparative, and global. The main drugs focused on are cocaine, opium, and cannabis, but will include alcohol, tobacco, and synthetics. The course also evaluates policy alternatives and the obstacles to policy reform. The course draws on readings from fields such as political science, anthropology, criminology, and history. The seminar is reading intensive, and is designed to cultivate critical writing and presentation skills. Enrollment limited to 20 first year students. Instructor permission required. FYS WRIT

Fall POLS0820U S01 15466 M 3:00-5:30(15) (P. Andreas)

POLS 0920A. Bleeding Heart Libertarianism.
What is libertarianism? In what sense can libertarians claim to combine the best of the “right” with the best of the “left”? Why do libertarians emphasize private property? Why are they skeptical of political agency? Are libertarians anti-democratic? Can they care about social justice? How do libertarians approach problems such as racism, sexism, militarism, state surveillance, global inequality, and environmental sustainability? This course will consider such questions from a variety of texts in the libertarian tradition, contemporary and classical. WRIT SOPH

Spr POLS0920A S01 24451 M 3:00-5:30(13) (J. Tomasi)

POLS 1010. Topics in American Constitutional Law.
This course will examine major constitutional controversies within the context of wider debates in political and legal theory. Readings from Supreme Court cases and prominent texts in political/legal theory. Each year we will focus on a different theme and set of constitutional issues. Topics might include a mix of federalism, separation of powers, privacy, free speech, and abortion. We will also focus how political and legal theory helps us to consider these topics in tandem

Spr POLS1010 S01 24380 MWF 1:00-1:50(06) (C. Brettschneider)

This course is about the “underbelly” of globalization. It introduces key sectors of the illicit global economy, including the clandestine flow of drugs, arms, people, body parts, arts and antiquities, endangered species, and toxic waste. The course compares these illicit sectors across time and place, and evaluates the practice and politics of state regulatory efforts. Particular attention is given to the role of the U.S. in the illicit global economy.

Fall POLS1020 S01 15467 MWF 10:00-10:50(14) (P. Andreas)

POLS 1030. Modern Political Thought.
What is justice? In a just society how would wealth be distributed? Would such distribution respect property rights? Does the state have the exclusive right to punish and if so why? Should the family be regarded as beyond justice? Is there a tension between democratic self-governance and freedoms from coercion? With an emphasis on both lectures and Socratic dialogue, this course is designed to engage students in conversations with the most important work in modern and contemporary political thought and to get them to engage with the most fundamental questions faced by our polity. We will read on canonical modern and contemporary writers to see understand the most important debates of the modern period and as importantly to help us dig deep into fundamental questions of justice and legitimacy. Readings from Hobbes, Locke, Rousseau, Marx, Rawls, Okin, Cohen and others. Some prior work in political theory or philosophy suggested.

Spr POLS1030 S01 24427 TTh 9:00-10:20(01) (S. Krause)

POLS 1070. Rights.
Investigates the moral and political foundations of rights through a reading of classical and contemporary theories of rights. Readings include Hobbes, Locke, Tocqueville, Kant, J.S. Mill, Burke, Marx, Nozick, Waldron, Okin, Ignatieff, and others. Topics include rights and justice; multiculturalism and group rights; human rights in the global context; animal rights and environmentalism; communitarian and postmodern critiques of rights; and rights in the context of American citizenship.

Fall POLS1070 S01 15517 TTh 1:00-2:20(10) (A. Gouveitch)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
POLS 1075. Ancients and Moderns.  
Examines the political thought of Plato and Aristotle together with three modern thinkers who were especially animated by these ancient views of politics: Machiavelli, Rousseau, and Nietzsche. Topics include the ends of politics and the nature of good government; the meaning of justice; the value of equality and of hierarchy; the nature of freedom; the role of virtue in political life; and the relationship between philosophy and politics. In reading these ancient and modern thinkers together, we gain a richer understanding of both the quarrels and the continuities between ancient and modern political thought – and the dynamic relationship between them.  
Fall POLS1075 S01 15548 MW 8:30-9:50(01)  
(S. Krause)  
POLS 1120. Campaigns and Elections.  
This course is designed to survey both historical and contemporary elections at both the congressional level, emphasizing the 2012 elections. Topics include campaigns, parties, candidates, voting behavior, public opinion, and the media.  
Spr POLS1120 S01 24452 TTh 1:00-2:20(10)  
(R. Arenberg)  
POLS 1130. The American Presidency.  
The origins and evolution of the Presidency in the American political and policy-making system. Special emphasis on the impact of presidential policies from Franklin Delano Roosevelt through Barack Obama; the presidential nomination and general election system; and an exploration of the future challenges facing the winner of the 2016 Presidential election.  
Spr POLS1130 S01 24431 MW 8:30-9:50(02)  
(W. Schiller)  
POLS 1150. Prosperity: The Ethics and Economics of Wealth Creation.  
What is prosperity? Whom does prosperity benefit? Which institutions and attitudes produce prosperity? What is the relation of prosperity to other values such as efficiency, happiness, equality, fairness, religious faith or personal freedom? This course explores the problem of prosperity from a variety of disciplinary perspectives: philosophical, economic, historical, religious, and literary. No Prerequisites. Freshmen welcome.  
Fall POLS1150 S01 15537 MW 1:00-1:50(06)  
(J. Tomasi)  
This course examines governmental powers under the United States Constitution, addressing the powers of Congress, the President, and the courts, as well as the relationship between the national and state governments. The primary reading materials will be leading Supreme Court cases, supplemented by additional reading materials on history and legal theory. The course will consider the role of the courts in enforcing constitutional principles in a democratic system, as well as theories of constitutional interpretation and constitutional change.  
Fall POLS1160 S01 15542 TTh 10:30-11:50(13)  
(S. Calabresi)  
POLS 1180. Feminist Thoughts for a Heated Climate.  
The ecological crises - the “sixth extinction,” “global warming,” “the eruption of Gaia” - have forced many humans to challenge contingent boundaries drawn in more or less compelling ways in the Western world. Dualisms opposing nature to culture, the human and the nonhuman, the natural and the technological, the feminine and the masculine, seem more destabilized than ever. When geologists came up with a new epoch called the “Anthropocene,” feminist theory was well equipped to problematize this allegedly omnipotent “anthropos.” Reciprocally, queer, post-colonial, and feminist theories have re-thought the never so normative, hardly stable, greatly unknown, nature of nature.  
Spr POLS1180 S01 24453 MWF 9:00-9:50(02)  
(C. Braut)  
POLS 1210. Latin American Politics.  
Focuses on political and economic transformation in contemporary Latin America. Special attention is given to the processes of market-oriented economic reforms and democratization that have swept the region during the last twenty-five years. Includes in-depth country case studies where key themes can be discussed and elaborated.  
Spr POLS1210 S01 24433 MWF 2:00-2:50(07)  
(R. Snyder)  
POLS 1260. Maps and Politics.  
How do maps affect politics, and vice versa? Maps fundamentally shape the way that we see our world and how we interact politically, economically, and socially, but maps are also shaped by political actors, interests, and institutions. This course will consider historical and contemporary issues that link maps and politics, including the connections between mapping and nation-states, colonialism, warfare, democratic politics, and indigenous rights. The course is suitable for all students with an interest in the topic.  
Spr POLS1260 S01 24379 MWF 10:00-10:50(03)  
(J. Branch)  
Over 50 million Latinos reside in the United States today, making them the largest minority group in the country. The current population size, projected growth trajectory, and population density of Latinos in many political battleground states have made this group a favored topic among politicians, interest groups and mass media. Yet, what do we really know about the politics and opinions associated with the diverse and expanding Latino population? How are Latinos incorporated into American political life? What difference does it make to be of Latino descent in the U.S.? This course presents an in-depth examination of this important population.  
Fall POLS1300 S01 15539 MWF 11:00-11:50(16)  
(M. Weir)  
POLS 1310. African American Politics.  
Focuses on the contemporary African American politics in various spheres of the American political environment. Examines also how the concept of an African American community has evolved and shifted historically. We will pay particular attention to the growing diversity within the African American community and discuss what these changes mean for black political participation, representation, and organizing.  
Spr POLS1310 S01 24430 MWF 11:00-11:50(04)  
(M. Orr)  
POLS 1360. U.S. Gender Politics.  
This course covers the politics of U.S. women as activists, voters, candidates, and elected officials. What explains the emergence of the modern-day women’s movement? How do women win political seats? Do women legislate differently than men? How did women become legislative and party leaders? How does sexuality and gender affect U.S. electoral politics? This course will also consider the ways in which social class, race-ethnicity, marital status, parenthood, feminism, religiosity, political orientation, and cultural beliefs or stereotypes influence women’s public policy and social beliefs. To what extent does gender define all women’s political and social viewpoints?  
Fall POLS1360 S01 15535 MWF 9:00-9:50(01)  
(K. Tate)  
POLS 1380. Ethnic Politics and Conflict.  
Course focuses on the politics of rising national consciousness and the development of ethnic conflicts. It covers sources of contemporary nationalism; nationalist political mobilization; emergence of conflicts; impact on societies of internal strife and wars; international interventions; explanations for resolution or persistence of conflict; politics of post-conflict states. The course combine analytical texts and case studies. Cases from Eastern and Western Europe, North America, South Asia, and Africa.  
Spr POLS1380 S01 24418 TTh 2:30-3:50(11)  
(L. Cook)  
Analyzes the most pressing global security problems today utilizing current theories of international politics. Examines the changing nature of security threats and considers the likely challenges we will face in the future. Issues covered include the causes of war and peace, weapons proliferation, terrorism and insurgencies, the role of technology, pandemics, humanitarian intervention and human security, and alliances and collective security. The course will include an international security simulation exercise. Pre-requisite: POLS 0400.  
Fall POLS1410 S01 15528 TTh 9:00-10:20(08)  
(N. Miller)  
POLS 1420. Money and Power in the International Political Economy.  
Examines how the interaction of states and markets create distinct global monetary and political orders. Class analyzes the shift from the classical liberal Gold Standard through the Post-War Bretton Woods arrangements through to the globalized IPE of today.  
Fall POLS1420 S01 15476 MWF 2:00-2:50(07)  
(M. Blyth)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor(s)</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>POLS 1490</td>
<td>Building a Better World: Film and Social Change</td>
<td>(K. Brown)</td>
<td>MWF 8:45-9:50(16)</td>
<td>Th</td>
<td>15524</td>
<td>Spr 100.00-125.00</td>
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<tr>
<td>POLS 1500</td>
<td>The International Law and Politics of Human Rights</td>
<td>(R. Blair)</td>
<td>MWF 11:00-12:50(15)</td>
<td>Th</td>
<td>24419</td>
<td>Spr 1:30-3:30(27)</td>
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<tr>
<td>POLS 1560</td>
<td>American Foreign Policy</td>
<td>(J. Colgan)</td>
<td>TTh 1:00-2:50(17)</td>
<td></td>
<td>24419</td>
<td>Spr 155.00-170.00</td>
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<tr>
<td>POLS 1600</td>
<td>Political Research Methods</td>
<td>(R. Cheit)</td>
<td>TTh 4:30-6:30(27)</td>
<td></td>
<td>15541</td>
<td>Spr 155.00-170.00</td>
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<tr>
<td>POLS 1730</td>
<td>Politics of Globalization</td>
<td>(R. College)</td>
<td>1:00-3:30(17)</td>
<td></td>
<td>24419</td>
<td>Spr 110.00-125.00</td>
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<tr>
<td>POLS 1740</td>
<td>Politics of Food</td>
<td>(J. Colgan)</td>
<td>10:00-11:50(17)</td>
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<td>15524</td>
<td>Spr 110.00-125.00</td>
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<tr>
<td>POLS 1821I</td>
<td>Issues in Democratic Theory</td>
<td>(C. Brette)</td>
<td>3:00-5:30(17)</td>
<td></td>
<td>24419</td>
<td>Spr 1:30-3:30(27)</td>
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<tr>
<td>POLS 1821J</td>
<td>Rhode Island Government and Politics</td>
<td>(J. Colgan)</td>
<td>4:00-6:30(17)</td>
<td></td>
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<td>Spr 110.00-125.00</td>
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<tr>
<td>POLS 1822Z</td>
<td>Geopolitics of Oil and Energy</td>
<td>(R. Arenberg)</td>
<td>3:00-5:30(17)</td>
<td></td>
<td>15524</td>
<td>Spr 3:00-5:30(17)</td>
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<tr>
<td>POLS 1822I</td>
<td>Social Attitudes and their Impact on U.S. Politics</td>
<td>(J. Colgan)</td>
<td>3:00-5:30(17)</td>
<td></td>
<td>15524</td>
<td>Spr 3:00-5:30(17)</td>
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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
POLS 1823N. Nationalism: Problems, Paradoxes and Power.
This seminar examines nationalism's historical evolution and reconstruc ts its role in contemporary political life. Drawing from a broad, interdisciplinary range of materials—from political philosophy to history and political science—the class interrogates the relationship between nationalism and other ideas considered constitutive of "modernity," like capitalism and popular sovereignty. In so doing, the class aims to understand the sources of nationalism's enduring power. Despite predictions of nationalism's demise, we are currently witnessing its revival in the developed democracies of the West. What explains nationalists' persistence? What are the roots of nationalism's continued imaginative appeal and political potential? WRIT
Spr POLS1823N S01 24458 M 3:00-5:30(13) (T. Neumann)

POLS 1823Q. Democratic Theory and Globalization.
What should democracy require in a globalized world? Is there a human right to democracy, so that all people should be governed democratically, or are there other legitimate forms of government? Should the United Nations and other international organizations be reformed to become more democratic? What does democracy call for when we affect the lives of people outside of our country? In this course, students will examine the leading ethical debates about democratic theory in an international context. It begins with three influential theories of democracy—the competitive, participatory, and deliberative—and applies them to important global issues. Enrollment limited to 20 juniors and seniors. WRIT
Spr POLS1823Q S01 24434 M 3:00-5:30(13) (R. Snyder)

POLS 1823Y. Global Governance.
This seminar explores the changing nature of global governance. Governance refers to the systems of authoritative rules, norms, institutions, and practices by means of which the international community manages its common affairs. Emphasizing in-depth readings of sustained arguments, this seminar examines key global governance processes and how they differ across different issue areas. It explores the variety of actors involved in managing global issues, surveys emerging trends, and explores possible ways of improving the capacity of the international community to deal with global challenges. Key issues examined include the global economy, nuclear weapons, the global environment, and human rights and justice. WRIT
Fall POLS1823Y S01 15534 W 3:00-5:30(17) (N. Tannenwald)

POLS 1824A. Counterinsurgency and Civil War.
Since the end of World War II, civil wars have killed vastly more people than interstate wars. Oftentimes, these conflicts have taken on the character of insurgencies, with rebels utilizing guerrilla tactics against more powerful state opponents. The goal of this course is provide students with a theoretical and historical understanding of this increasingly dominant form of conflict. Specific topics explored include the causes of civil war, mobilization and recruitment into rebel groups, patterns of violence, counterinsurgency, war termination, conflict recurrence, and the aftermath of civil war. Enrollment limited to 20 junior and senior Political Science or International Relations concentrators. WRIT
Spr POLS1824A S01 24429 Th 4:00-6:30(17) (N. Miller)

POLS 1824B. Post Conflict Politics.
What, if anything, can the international community do to keep peace in countries wracked by civil war? Why does international intervention succeed in some countries but not others? How can war-torn societies overcome the myriad challenges inherent in post-conflict politics, including disarmament, demobilization and reintegration of ex-combatants; repatriation of refugees; transitional justice; and reconciliation of wartime adversaries? This senior seminar addresses these questions through a combination of case studies, in-class discussions and debates, and readings from a wide variety of academic, policy and philosophical sources. While there are no prerequisites for the course, some familiarity with quantitative data analysis will be useful. WRIT
Fall POLS1824B S01 15469 Th 4:00-6:30(04) (R. Blair)

POLS 1824C. Political Communication.
This course will focus on the importance of written and oral communication in public decision-making, particularly in the Congressional context. The course will examine the impact on political interactions, and the influencing of public policy decisions and outcomes. The course will emphasize some of the practical tools for producing relevant, useful material in the professional policy and the communications arenas. The course requires several writing assignments focusing on different public policy analyses and political communications tools as well as active class participation including oral presentations. WRIT
Spr POLS1824C S01 24454 T 4:00-6:30(16) (R. Arenberg)

POLS 1824J. Culture, Identity and Development.
There is a consensus, in scholarly and policy circles, on the importance of cultural processes and identity for a range of development outcomes across the world. Yet there is far less understanding of how culture and identity influence development. The aim of this course is to develop this understanding. We will draw on readings across the social sciences as well as an analysis of development interventions across the globe to gain a comprehensive understanding of the ways in which culture and identity, conceptualized as actively constructed and changing, influence a range of outcomes including health, sanitation, education, inequality and economic development. WRIT
Fall POLS1824J S01 15530 W 3:00-5:30(17) (P. Singh)

POLS 1824L. Environmental Political Thought.
In our context of ecological crises, Environmental Political Theory (or Ecosophy) has boomed, attesting of the need for new concepts with which to think our unprecedented situation. Ecosophers think of nuclear energy, GMOs, climate change, the 6th extinction, etc, in terms of responsibility toward future generations, “de-growth,” sustainability, the anthropocene, Gaia, etc. This course will survey some major schools of thought within Ecosophy, highlighting the diversity of the environmentalist movement. We will focus on one common thread weaving eclectic ecosophical currents and concepts: the question of humans' relationship to the nonhuman. WRIT
Fall POLS1824L S01 15543 T 4:00-6:30(09) (C. Braut)

POLS 1824M. The Politics of Race and the Criminal Justice System.
This course examines the politics of race and the criminal justice system in the U.S. It proceeds in three parts. First, it examines the political origins and consequences of racial disparities in citizens’ interactions with the police, courts and prisons. Next, it considers how the public, the media, and politicians relate and respond to these issues. Finally, the course concludes by examining the prospects for reform and the consequences of inaction. WRIT DPPL
Spr POLS1824M S01 24460 Th 4:00-6:30(17) (P. Testa)

POLS 1824P. Polycentricity.
Each of us has limited mental capacities. Given the world is full of difficult problems, how should we best organize our efforts to tackle them? Should the best and smartest come together and deliberate the best solution? Interestingly enough, the core social systems of modern society are built around competition between decision centers rather than collective deliberation. Reach a better understanding of the epistemic and motivational reasons behind organizing social systems in a polycentric rather than in a monocentric fashion. This course will draw on a wide variety of literature from history, philosophy, political science and economics. WRIT
Spr POLS1824P S01 24456 T 4:00-6:30(16) "To Be Arranged"

Concentrators who have given evidence of superior work in political science may be admitted to honors seminar on the basis of an application submitted in the spring of their junior year. Application and guidelines may be obtained on the Department of Political Science website. Prerequisite: Fulfillment of Methods requirement. Enrollment limited to 20 senior Political Science concentrators. Instructor permission required. WRIT
Fall POLS1910 S01 15545 T 4:00-6:30(09) (T. Neumann)
POLS 1920. Senior Honors Thesis Preparation.
This course is a continuation of POLS 1910. Political Science Honors students who are completing their theses should enroll. Prerequisite: POLS 1910. Instructor permission required. WRIT
Spr POLS1920 S01 24457 T 4:00-6:30(16) (T. Neumann)

POLS 1970. Individual Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

POLS 1971. Individual Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Introduction to research methods common in political science research. Topics include theory development, problems of explanation and causation, problem identification, research design, and other fundamentals of empirical research. FIRST YEAR POLITICAL SCIENCE GRADUATE STUDENTS ONLY. Enrollment limited to 14.
Fall POLS2000 S01 15527 Th 11:30-2:00 (R. McDermott)

POLS 2050. Preparing the Prospectus I.
This course covers selected topics in research design and methodology and is designed to help students enrolled in the Political Science PhD program to write and defend a prospectus in their third year of study.
Prerequisite: POLS 2050.
Fall POLS2050 S01 15477 W 3:00-5:30(17) (M. Blyth)

POLS 2051. Preparing the Prospectus II.
This course covers selected topics in research design and methodology and is designed to help students enrolled in the Political Science PhD program to write and defend a prospectus in their third year of study.
Prerequisite: POLS 2050.
Spr POLS2051 S01 24378 W 1:30-4:00 (M. Blyth)

POLS 2060. International Relations and History.
This graduate seminar considers history both as a topic and as a method of international relations scholarship, and in other subfields of political science as well. We will read and discuss works that fall at the intersection of history and international relations, on topics including the sources of interstate conflict, the origins of the nation-state, and colonialism and postcolonialism. Open to Political Science Graduate students only.
Fall POLS2060 S01 15479 Th 3:00-5:30 (J. Branch)

This class provides an introduction to the major theoretical approaches and applied research in the study of U.S. public opinion. We examine opinions on a variety of topics. Enrollment limited to 14 Political Science graduate students.
Spr POLS2070 S01 24450 W 10:45-1:15 (K. Tate)

Explores major works that span the range of theoretical approaches and intellectual styles in modern comparative research. Includes in-depth interviews with leading scholars where they reflect on their intellectual formation, their works and ideas, the nuts and bolts of the research process, and the evolution of the field. Enrollment limited to 14. Graduate students only; qualified undergraduates with instructor permission.
Fall POLS2090DS01 15533 Arranged (R. Snyder)

POLS 2100. Proseminar in American Politics.
Introduction to broad issues in American politics. Topics include the interplay of political institutions in the American setting, public opinion formation, the process of policy-making, and voting behavior. Enrollment limited to 14. Graduate students only; qualified undergraduates with instructor permission.
Fall POLS2100 S01 15529 T 9:00-11:30 (W. Schiller)

POLS 2130. Proseminar in International Relations.
Surveys the main theoretical trajectories and intellectual disagreements that define International Relations as a discipline today. Positions examined include varieties of rationalism and constructivism; realism-liberalism-sociological approaches; and systemic and subsystemic theories. Also considers debates about the contours of contemporary world politics, America and the world, moral issues, and the links between theory and policy. Enrollment limited to 14. Not open to undergraduates.
Spr POLS2130 S01 24385 T 1:30-4:00 (J. Colgan)

POLS 2140. Post Cold War Conflict.
Course explores the nature and causes of post-Cold War conflict. We’ll discuss the end of the Cold War, as well as prominent contemporary themes, such as the spread of ethnic warfare and humanitarian intervention, the privatization of security provision, and the proliferation of “transnational threats” such as cross-border crime and terrorism. Enrollment limited to 14. Graduate students only; qualified undergraduates with instructor permission.
Spr POLS2140 S01 24376 M 6:00-8:30PM (P. Andreas)

This course will examine contemporary and historical work in the area of democratic political and legal theory. Topics include the relationship between democracy and individual rights, deliberative vs. aggregative conceptions of democracy, the substance/procedure controversy, and the role of judicial review in a democracy. Open to graduate students only.
Fall POLS2150 S01 15487 Arranged (C. Brettschneider)

POLS 2260. Comparative Politics and China.
Will explore the main theoretical, empirical, and methodological approaches to the study of contemporary Chinese politics. Will relate these approaches to broader analytical issues in the field of comparative politics. What phenomena are generally studied in Chinese politics, and how are they studied? How are arguments made, and how could they be made more effectively? What is not studied that should be? How should regionally-focused empirical research be structured? What are the most effective ways to integrate area studies, broader comparative approaches, and theory? Course will prepare graduate students for dissertation research on China specifically and comparative politics more generally.
Spr POLS2260 S01 24438 Arranged (E. Steinfield)

POLS 2450. Exchange Scholar Program.
Fall POLS2450 S01 15025 Arranged ‘To Be Arranged’
Spr POLS2450 S01 24043 Arranged ‘To Be Arranged’

POLS 2550. Introduction to Quantitative Research Methods.
This course introduces students to statistical theory and quantitative methods commonly used in political science and public policy. The course focuses on statistical inference using multiple techniques of regression analysis and gives students opportunities to become proficient users of the statistical software package Stata as they develop statistical models and analyze their data. Enrollment limited to 14. Open to graduate students in Political Science and Public Policy only.
Fall POLS2550 S01 15549 T 1:30-4:00 (P. Testa)

POLS 2590. Quantitative Research Methods.
An intermediate statistics course for graduate students. Topics include multiple regression, statistical inference, categorical dependent variable models, instrumental variable models, and an introduction to time series. Course readings and applications examine models used in different fields of political science and public policy including American institutions, comparative politics, and international relations. Open to graduate students concentrating in Political Science or Public Policy.
Spr POLS2590 S01 24381 W 3:00-5:30(14) (R. Blair)

POLS 2975. Field Survey and Research Design.
An independent study directed by a tenure-line faculty member of the Department of Political Science. Only third-year graduate students may register for the course; it is intended to provide a framework for producing a formal research design modeled on the dissertation prospectus.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
POLS 2976. Field Survey and Research Design.
An independent study directed by a tenure-line faculty member of the Department of Political Science. Only third-year graduate students may register for the course; it is intended to provide a framework for producing a formal research design modeled on the dissertation prospectus.

POLS 2980. Individual Reading and Research.
An independent study course directed by a tenure-line faculty member in the Department of Political Science. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

POLS 2981. Individual Reading and Research.
An independent study course directed by a tenure-line faculty member in the Department of Political Science. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

POLS 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

POLS 2991. Thesis Research and Preparation.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Portuguese and Brazilian Studies

POBS 0100. Elementary Portuguese.
Designed for students with little or no preparation in the language. Stresses the fundamental language skills of understanding, speaking, reading and writing. Aspects of Portuguese and Brazilian culture are also presented. Uses a situational/natural approach that emphasizes communication in Portuguese from the very first class. A year course; only in exceptional circumstances is credit given for one semester alone.

POBS 0110. Intensive Portuguese.
A highly intensive course for students with little or no preparation in the language. Stresses the fundamental language skills of understanding, speaking, reading, and writing. Aspects of Portuguese and Brazilian culture are also presented. Uses a situational/natural approach that emphasizes communication in Portuguese from the very first class. A two-semester sequence in one semester with ten contact hours each week. Carries double credit and covers the equivalent of two semesters. This course should be chosen, in the fall, by students beginning the study of Portuguese as sophomores who would like to participate in the Brown-in-Brazil Program as juniors. Offered every semester.

POBS 0200. Elementary Portuguese.
Designed for students with little or no preparation in the language. Stresses the fundamental language skills of understanding, speaking, reading and writing. Aspects of Portuguese and Brazilian culture are also presented. Uses a situational/natural approach that emphasizes communication in Portuguese from the very first class. A year course; only in exceptional circumstances is credit given for one semester alone. Prerequisite: POBS 0100.

POBS 0400. Writing and Speaking Portuguese.
Designed to improve the students' ability in contemporary spoken and written Portuguese. Using such cultural items as short stories, plays, films, videos, newspaper and magazine articles, and popular music, students discuss a variety of topics with the aim of developing good communication skills. Attention also given to developing writing ability. A systematic review of Portuguese grammar is included. Prerequisite: POBS 0200, or POBS 0110, or placement. Conducted in Portuguese. Completion of POBS 0400 is the minimum requirement for participation in the Brown-in-Brazil Program. Offered every semester. WRIT

POBS 0610. Mapping Portuguese-Speaking Cultures: Brazil.
Selected literary and cultural texts that serve as vehicles for a deeper understanding of Brazilian society. Literary materials will be taken from several genres and periods with special attention to contemporary writings. Other media such as film and music will also be included. Considerable emphasis on strengthening speaking and writing skills. Prerequisite: POBS 0400, placement or instructor's permission. Conducted in Portuguese.

POBS 0620. Mapping Portuguese-Speaking Cultures: Portugal and Africa.
Selected literary and cultural texts that serve as vehicles for a deeper understanding of Portuguese and Luso-African societies. Literary materials will be taken from several genres and periods with special attention to contemporary writings. Other media such as film and music will also be included. Considerable emphasis on strengthening speaking and writing skills. Prerequisite: POBS 0400, placement or instructor's permission. Conducted in Portuguese.

POBS 0637A. History of Jews in Brazil (HIST 0637A).
Interested students must register for HIST 0637A.

POBS 0810. Belonging and Displacement: Cross-Cultural Identities.
Focuses on the representation of immigrants, migrants and other “border crossers” in contemporary literature from Brazil and other countries. How do people respond to the loss of home and the shift to a new culture? Is “going home” possible? How do individuals deal with their dual or triple identities? Pittón, Lispector, Sciar, Rushdie, Salih, Cristina Garcia, V. S. Naipaul and others. Conducted in English. Enrollment limited to 20 first year students. FYS WRIT

POBS 0850. Comparative Approaches to the Literatures of Brazil and the United States.
Brazil and the United States have much in common: continental territories, huge natural resources, dynamic economies and multi-ethnic populations. Yet, their histories and cultures are distinctive and unique, as suggested in Vianna Moog's classic symbolic contrast between the Brazilian bandeirante and the American pioneer. We will undertake a comparative study of the two countries' literatures over the past eighty years with an eye towards exploring contextual, thematic and technical analogies as well as differences. Faulkner, Ramos, Lispector, Morrison, Rosa, Sciar, DeLillo, Carvalho, and Doctorow. Some attention to music, film and the visual arts. Enrollment limited to 15. Conducted in English. FYS WRIT

We will analyze how a new mindset that would later be called modernity slowly emerged from the medieval world and how the trials and errors of the 15th and 16th century navigators helped shape that transformation. The seminar is interdisciplinary insofar as the readings will include developments in astronomy, geography, shipbuilding, mathematics, philosophy, as well as what could be called early anthropology, as stepping stones to the first scientific revolution. Conducted in English. Enrollment limited to: 20. Reserved for First Year students. FYS WRIT

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
POBS 0990. Mapping Cross-Cultural Identities.
How do we construct our own identity as life becomes a multitude of
narrative threads intersecting and overlapping like roadways on a map?
How do we reconfigure identities vis-à-vis those who surround us?
We will investigate the ever-changing map of cultural identities and its
repercussions on human existence via contemporary literature and a
series of projects that incorporates the arts (visual, digital, literary) and
oral history. Some of the writers include Julia Alvarez, Kiran Desai, Junot Diaz,
Milton Hatoum, Chang-Rae Lee, Clarice Lispector, Dinaw Mengestu,
Nélida Piñón, Salman Rushdie, Taiye Selasi and others. No experience in
the arts necessary. SOPH DPLL WRIT
Spr POBS0990 S01 24666  W 3:00-5:30(14) (P. Sobral)

POBS 1030. Portuguese Stylistics: Advanced Language Study and
Creative Writing.
An intensive writing course covering basic genres: letter, short essay,
diary, short story, and poetry. Students write five pages per week on five
different preassigned topics that range over a wide variety of subjects.
Exposes students to idiomatic and stylistic writing in a multitude of areas.
In class, students read and comment on each other’s writings. Enrollment
limited to 20. Conducted in Portuguese. WRIT
Fall POBS1030 S01 15857 Th 2:30-5:00 (L. Simas-Almeida)

POBS 1210. Afro-Brazilians and the Brazilian Polity (AFRI 1210).
Interested students must register for AFRI 1210.
Fall POBS1210 S01 16822 Arranged "To Be Arranged"

POBS 1370. US and Brazil: Tangled Relation (HIST 1370).
Interested students should register for HIST 1370.
Spr POBS1370 S01 25573 Arranged "To Be Arranged"

POBS 1501A. Out of Portuguese Africa: Deconstructing Portuguese
Colonialism in Literature.
Examines both fictional narratives written in Portuguese by African authors
and fictional works by Portuguese authors that focus on the colonial
experience of Angola, Mozambique, and Cape Verde. Aims in particular
at the critical analysis of Portuguese colonialism as a means to verify its
specificity or lack thereof within the larger context of overarching European
colonialisms. Conducted in Portuguese.
Spr POBS1501A S01 24665 Th 4:00-6:30(17) (L. Simas-Almeida)

POBS 1600A. The Afro-Luso-Brazilian Triangle (AFRI 1020C).
Interested students must register for AFRI 1020C.
Spr POBS1600A S01 25534 Arranged "To Be Arranged"

POBS 1670. History of Brazil (HIST 1310).
Interested students must register for HIST 1310.
Fall POBS1670 S01 16821 Arranged "To Be Arranged"

POBS 1720. Literacy, Culture, and Schooling for the Language
Minority Student.
Focuses on increasing awareness of the intersection of language and
literacy, the sociocultural influences on literacy development, and the
application of diverse strategies that support the acquisition of second-
language literacy. Combines a theoretical exploration of literacy processes
and methodological implications with a clinical requirement of four hours
weekly in a second-language field-teaching practicum. Conducted in
English.
Fall POBS1720 S01 15860 Th 4:00-6:30(04) (S. Smith)

POBS 1740. Artful Teaching: Intersecting the Arts with Foreign
and Second Language Acquisition.
How can we create meaningful experiences for those learning a foreign or
second language? What makes the creative arts (art)culate so powerfully
and naturally with foreign and second language acquisition? How do
the arts enable students to become aware of surrounding cultures while
simultaneously acquiring a new language? This course will explore
connections between the arts—visual, literary and performing—and
language acquisition in a combined workshop and seminar approach.
Readings will include authors Sheridan Blau, Augusto Boal, Shirley Brice
Heath, Paulo Freire, Jan Mandell, Twyla Tharp, Jeffrey D. Wilhelm and
others.
Spr POBS1740 S01 24667  F 9:00-11:50 (P. Sobral)

POBS 1970. Reading and Guided Study.
Section numbers vary by instructor. Please check Banner for the correct
section number and CRN to use when registering for this course.
This independent study course is designed for students working on honors
projects. Written permission of the concentration advisor (Prof. Sobral) is
required. Section numbers vary by instructor. Please check Banner for the
correct section number and CRN to use when registering for this course.
POBS 2010A. Language Theory and Curriculum Development.
Focuses on the application of language theory, methodology, and
curriculum development procedure for classes enrolling English language
learners. Participants focus on setting appropriate goals and objectives
aligned with learning standards and develop appropriate curricula in
several subject areas. Conducted in English.
Fall POBS2010A S01 15861 T 4:00-6:30(09) (M. Pacheco)

POBS 2020A. Applied Linguistics for ESL.
Focuses on the linguistic development of bilingual children. Addresses
three major dimension of language acquisition-linguistic, cognitive
and sociocultural-within educational contexts for students of all ages.
Conducted in English. Enrollment limited to 15 graduate students.
Spr POBS2020A S01 24688 Th 4:00-6:30(17) (S. Smith)

POBS 2120A. ESL Methodology Assessment and Evaluation.
An overview of the current principles, practices and approaches that
inform assessment and evaluation for English language learners.
Participants engage in class activities that duplicate selected assessment
approaches and identify strategies for integrating assessment with
planning and instruction appropriate to the language proficiency of
students. Participants explore assessment research and theoretical
background for an understanding of the complexity of evaluating student
achievement. Conducted in English.
Spr POBS2120A S01 24689 T 4:00-6:30(16) (M. Pacheco)

POBS 2500F. Tales of the "Sertão".
The reality and mythology of the "sertão" have long been a source of
inspiration for Brazilian writers, visual artists, and filmmakers. This seminar
considers the transformations of the "sertão" motif since the second half
of the nineteenth century. Fiction by José de Alencar, Euclides da Cunha,
Graciliano Ramos and João Guimarães Rosa. Films by Glauber Rocha
and Sandra Kogut. Conducted in Portuguese.
Fall POBS2500F S01 15839 W 3:00-5:30(17) (L. Valente)

POBS 2600P. Fernando Pessoa and Co.
An analysis of key writings by the major Portuguese Modernist poet
Fernando Pessoa, as well as by his more important heteronyms,
particularly Alvaro de Campos, Alberto Caeiro, Ricardo Reis, and António
Mora. The course will emphasize the recurrent themes of identity, divided
self, meaning, disquietude, and displacement. Conducted in Portuguese.
Fall POBS2600P S01 15837 T 6:30-8:50PM (O. Almeida)

POBS 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are
paying the registration fee to continue active enrollment while preparing for
a preliminary examination.
Fall POBS2970 S01 15023 Arranged "To Be Arranged"
Spr POBS2970 S01 24041 Arranged "To Be Arranged"

POBS 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are
paying the registration fee to continue active enrollment while preparing for
a thesis.
Fall POBS2990 S01 15024 Arranged "To Be Arranged"
Spr POBS2990 S01 24042 Arranged "To Be Arranged"

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Public Health

PHP 0050. Pain and the Human Condition: Exploring the Science, Medicine, and Culture of Pain.

Pain is a universal human experience, yet it is highly subjective. For most, pain represents an occasionally unpleasant, self-limited experience. However, for others, chronic pain persists beyond the recovery from an injury or as a result of a chronic health condition. Persons with chronic pain often describe their pain as permeating every aspect of their lives. While an active area of research, pain remains a significant challenge to the individual seeking treatment, the health care provider and society. This multidisciplinary course introduces students to scientific, medical, and public health aspects of pain and explores personal narratives and cultural meanings of pain. Enrollment limited to 20 first year students. FYS WRIT Fall PHP0050 S01 16445 TTh 2:30-3:50(03) (N. Trivedi)

PHP 0100. First year seminar: Statistics is everywhere

Statistics is the universal language behind data-enabled decision making. Examples include Google's page ranking, Amazon's customer recommendations, weather prediction, medical care and political campaign strategy. This seminar will expose students to a variety of problems encountered in the media, in science and in life for which solutions require analysis of and drawing inferences from data. We will introduce basic concepts such as randomness, probability, variation, statistical significance, accuracy, bias and precision. The course will discuss statistical problems from reading assignments and material identified by the students. We will use simulation to illustrate basic concepts. The study will require students to read the material and perform computer simulations prior to class. Fall PHP0100 S01 16446 TTh 1:00-2:20(10) (Z. Wu)

PHP 0310. Health Care in the United States.

Introduction to the health care delivery system. An overview of the U.S. health care financing, delivery and regulatory system. Considers the interaction between paying for and providing and assuring the quality of health services; changes in one component of the system inevitably affect the others. Addresses the balance between employer funded health insurance, publicly funded health insurance and the consequences of not being insured. Seven discussion sections arranged during the semester. Open to undergraduates only. Spr PHP0310 S01 25498 MW 12:00-12:50(05) (I. Wilson)

PHP 0320. Introduction to Public Health.

An introductory overview of the U.S. Public Health System with an emphasis on the core functions of public health, challenges and strategies for working with communities, and specific health issues that impact the health of the population. Presents a comprehensive overview of the environmental and behavior factors associated with health promotion and disease prevention. Fall PHP0320 S01 16448 MW 11:00-11:50(16) (A. Harrison)

PHP 0850. Fundamentals of Epidemiology.

As the cornerstone of public health, a strong foundation in epidemiology provides students with the ability to investigate, clarify and criticize claims of disease causation. This course provides students with a foundation in basic epidemiologic concepts and methods. Key measures of disease occurrence and effects used in epidemiology will be discussed; strengths and weaknesses of alternative epidemiologic study designs will be examined. Interpreting epidemiologic evidence to inform public health policy and practice will be emphasized throughout the course. Open to Public Health concentrators and others by permission; Class limit 80. Fall PHP0850 S01 16435 TTh 2:30-3:50(03) (S. Buka)

PHP 1070. The Burden of Disease in Developing Countries.

Defines and critically examines environmental, epidemiologic, demographic, biomedical, and anthropological perspectives on health and disease in developing countries. Emphasis on changes in the underlying causes of morbidity and mortality during economic development. Focuses on the biosocial ecology of diseases. Required major term paper worth 50% of final grade is scholarly centerpiece of course. Weekly discussion sections and small group research projects supplement the two exams and term paper. Guest lecturers cover different diseases and public health perspectives. Enrollment limited to 65. DPLL WRIT Fall PHP1070 S01 16436 MW 8:30-9:50(01) (S. McGarvey)

PHP 1100. Comparative Health Care Systems.

Focuses on principles of national health system organization and cross-national comparative analysis. Emphasizes application of comparative models to the analysis of health and health-related systems among nations at varying levels of economic development and health care reform. Addresses research questions related to population health and systems' performance. Questionnaire completion required for Freshman and Sophomore students. Enrollment limited to 30. DPLL Fall PHP1100 S01 16449 MW 10:00-11:20 (C. Sammartino)

PHP 1501. Essentials of Data Analysis.

This course covers the basic concepts of statistics and the statistical methods commonly used in the social sciences and public health with an emphasis on applications to real data. The first half of the course introduces descriptive statistics and the inferential statistical methods of confidence intervals and significance tests. The second half introduces bivariate and multivariate methods, emphasizing contingency table analysis, regression, and analysis of variance. This is designed to be a first course in Statistics. The course is intended for Public Health or Statistics concentrators. Others can register with instructor's permission. There are no prerequisites. Fall PHP1501 S01 16450 TTh 1:00-2:20(10) (R. Gutman)

PHP 1600. Obesity in the 21st Century: Causes, Consequences and Countermeasures.

The scope of obesity knowledge is too large to cover during one single course, therefore we will focus primarily on obesity-related health outcomes, assessment of obesity, obesity epidemiology, social and behavioral correlates of obesity, obesity and stigma, policy and interventions across population groups. The readings for this course are multi-disciplinary in nature and integrate epidemiological, biological, sociological, political and philosophical perspectives. This course is specific to the United States and thusly all readings will reflect this contextual focus. Enrollment limited to 30. DPLL Spr PHP1600 S01 25498 M 3:00-5:30(13) (A. Keita)

PHP 1680L. Pathology to Power: Disability, Health and Community.

This course offers a comprehensive view of health and community concerns experienced by people with disabilities. Guest speakers, and hands on field research involving interactions with people with disabilities will facilitate the students gaining a multi-layered understanding of the issues faced by people with disabilities and their families. DPLL Fall PHP1680L S01 16464 W 3:00-5:50 (S. Skeels)

PHP 1700. Current Topics in Environmental Health.

This course is designed to introduce students to the field of environmental health, and demonstrate how environmental health is integrated into various aspects of our lives, both directly and indirectly. Topics to be covered include: toxic metals, vector-borne disease, food safety, water quality, radiation, pesticides, air quality, hazardous waste, risk assessment, and the role of the community in environmental health. Several topics will be presented by guest speakers so that students can learn from the expertise of professionals in the field. Enrollment limited to 65. Fall PHP1700 S01 16755 F 1:00-3:30 "To Be Arranged"
PHP 1740. Principles of Health Behavior and Health Promotion Interventions.
Examines health behavior decision-making and elements for design of health promotion interventions. Covers theories of health behavior (focusing on primary and secondary prevention), principles of intervention design, and reading of research literature. Emphasizes psychological, social, and proximate environmental influences on individuals’ health-related behaviors. Restricted to juniors, seniors, and graduate students. Prerequisite: PHP 0320 or equivalent. Enrollment limited to 25.
Fall PHP1740 S01 16465 MW 1:00-2:20 (P. Risica)

The course provides an overarching capstone experience to Public Health seniors. It is designed to weave together 3 threads, specifically: (1) Capstone final written project based on Public Health concentration goals, including a systematic review or data analysis; (2) Formalizing and presenting career plans; (3) Learning and practicing key principles of effective workplace skills. The course provides opportunities to synthesize and reflect on the knowledge gained during the undergraduate program, provide support for solidifying effective next career steps, and provide important soft skills for excelling in the workplace. Prerequisite: PHP 0310 and 0320. Open to Senior Public Health concentrators only. WRIT
Fall PHP1910 S01 16438 W 3:00-5:30(17) (E. Loucks)

A special project may be arranged in consultation with an individual faculty sponsor. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Two semesters of PHP 1980, Honors Thesis Preparation, will be devoted to the development and implementation of an Honors project, and of the writing of the Honors Thesis for the Public Health Concentration. WRIT

PHP 2030. Clinical Trials Methodology.
We will examine the modern clinical trial as a methodology for evaluating interventions related to treatment, rehabilitation, prevention and diagnosis. Topics include: the history and rationale for clinical trials, ethical issues, study design, protocol development, sample size considerations, quality assurance, statistical analysis, systematic reviews and meta-analysis, and reporting of results. Extensively illustrated with examples from various fields of health care research. Recommended prerequisites: introductory epidemiology and statistics. Pre-requisites: (PHP 2120 or PHP 2150) and either PHP 2508, 2510, or 2520. Open to graduate students only.
Fall PHP2030 S01 16439 M 1:00-3:30 (L. Gareen)
Spr PHP2040 S01 25497 TTh 2:30-3:50(11) "To Be Arranged"

PHP 2040. Survey Research Methods.
Emphasizes the theory of sampling and survey methods and their application to public health research. Topics include: survey design and planning; principles of sampling and survey terminology; questionnaire construction; protection of human subjects; data collection (including interviewing and data coding procedures); and application, presentation, and evaluation of results. Suggested prerequisites: PHP 2120, and PHP 2508 or 2510. Open to graduate students only.
Fall PHP2040 S01 16439 M 1:00-3:30 (I. Gareen)

PHP 2070. Public Health/Community Service Internship.
The course is an introduction to the history, organization, resources, concepts and issues of public health and health care. Students will be matched according to their interests in a related practical experience in a health-related organization, with the expectation that they complete a project or produce a product of public health utility. This gives students an opportunity to critically apply knowledge and skills learned in didactic sessions. Instructor permission required.
Fall PHP2070 S01 16467 Arranged (P. Vivier)
Spr PHP2070 S01 25499 Arranged (P. Vivier)

PHP 2090. Research Grant Writing for Public Health.
This course focuses on providing knowledge and experience in creating high quality public health research grant applications. Course objectives include developing significant and innovative scientific hypotheses, learning principles of effective written communication, and developing a research grant application suitable to submit for funding. Designed for Public Health School PhD students, post-doctoral fellows, and Masters students with advanced degrees (e.g. MD, PhD). Prerequisite: PHP 2120 or PHP 2150 or instructor permission.
Fall PHP2090 S01 16440 Th 2:30-5:00 (J. Braun)

Epidemiology quantifies patterns and determinants of human population health, with a goal of reducing the burden of disease, injury, and disability. An intensive first course in epidemiological methods, students learn core principles of study design and data analysis through critiques of published epidemiological studies as well as hands on practice through weekly exercises and assignments. This is a graduate-level course aimed at masters and PhD students. The course is not open to first year students or sophomores but may be available for advanced undergraduates with the instructor's permission.
Fall PHP2120 S01 16442 Th 10:30-11:50(13) (M. Lurie)

The overall objective of this course is to provide students with a strong foundation in epidemiologic research methods. This is the first of a two- or four-course sequence in epidemiologic methods aimed at students who expect to eventually conduct their own epidemiologic research. There will be a strong quantitative focus in this course. By the end of the foundations course, students should be sufficiently familiar with epidemiologic research methods to begin to apply these methods to their own work. Prerequisite: PHP 2507 or 2510 (either may be taken concurrently); the typical student will also have some introductory knowledge of epidemiology.
Fall PHP2150 S01 16443 F 9:30-12:00 (T. Zheng)

PHP 2250. Advanced Quantitative Methods in Epidemiologic Research.
This course provides students with conceptual and quantitative tools based on counterfactual theory to make causal inference using data obtained from observational studies. Causal diagrams will be used to provide alternative definitions of and inform correcting for common biases. Non-, semi-, and fully parametric methods for addressing these biases will be discussed. These methods include standard regression, propensity scores, inverse probability weighting, and marginal structural models. Settings in which such methods may not be appropriate will be emphasized. Prerequisite: PHP 2200 and 2511; or PHP 2200 and 2508; or instructor permission. Enrollment limited to 25 graduate students.
Fall PHP2250 S01 16444 TTh 1:00-2:20(10) (C. Howe)

This course provides students with fundamental principles of behavioral and social research methodology for understanding the determinants of public health problems, and for executing and testing public health interventions. We will focus on experimental methods, observational studies, and qualitative approaches. We will develop skills in understanding and interpreting data—both quantitative and qualitative. Throughout the course we will emphasize ethical, cultural, and professional issues for designing public health interventions. Prior coursework in research methodology and quantitative methods is recommended but not required. Open to graduate students and advanced undergraduates. Enrollment limited to 15.
Fall PHP2300 S01 16468 W 1:00-3:30 (D. Operario)
PHP 2325. Place Matters: Exploring Community-Level Contexts on Health Behaviors, Outcomes and Disparities.
There is growing recognition among researchers, public health practitioners and policymakers that place matters for health behaviors and health outcomes. But what is place, and why does it matter? As with many health-related outcomes, the prevalence of ill health is unequally distributed across populations with certain features playing significant roles on health. In this course, we will explore the features of community environments and the associations with health behaviors (e.g. physical activity, preventive care, alcohol, sexual behaviors) and health outcomes (e.g. obesity, cardiovascular disease and mental health). This course is specific to the US. Enrollment limited to 25.
Fall PHP2325 S01 16469 T 9:00-11:30 (P. Nolan)

PHP 2340. Behavioral and Social Science Theory for Health Promotion.
This course will help students become familiar with behavioral and social science theories commonly used for planning disease prevention/health promotion interventions. In addition to review of specific theories, topics to be discussed include: how theories are developed and tested; challenges and potential pitfalls in using theory for intervention planning; and creation of causal diagrams based on concepts from theories. Undergraduates need permission of instructor; priority will be for Community Health concentrators. Enrollment limited to 25.
Fall PHP2340 S01 16470 T 12:00-2:30 (D. Williams)

PHP 2370. Etiology of Substance Use Disorders.
This course will help students become familiar with behavioral, genetic, neurobiological, and cultural factors related to the onset and course of substance use disorders. In addition to review of specific theories, empirical evidence supporting models will be covered as will the integration of evidence across models. Priority will be given to postdoctoral fellows.
Fall PHP2370 S01 16472 F 1:00-3:30 (P. Monti)

PHP 2390. Quantitative Methods for Behavioral and Social Sciences Intervention Research.
This course provides broad coverage of the quantitative methods used in behavioral intervention research ranging from descriptive data analysis to longitudinal methods. Students will learn to conduct, interpret, and write up a range of statistical procedures including basic psychometrics, t-tests and ANOVAs, correlations, and multiple regression. Students also will be introduced to more advanced techniques used for longitudinal data analysis in order to understand their common uses in behavioral intervention research. The course provides students in the Master's program in Behavioral and Social Health Sciences the requisite skills to conduct analyses of behavioral data as part of their Master's Thesis. Enrollment limited to 15 graduate students in the BSHS Master's program and the MPH program.
Fall PHP2390 S01 16473 MTh 1:00-2:20 (C. Kahler)

PHP 2410E. Medicare: A Data Based Policy Examination.
This course will explore the role of Medicare as America's health insurer for the elderly and disabled through the use of real Medicare insurance claims data, examining how Medicare policy changes in financing and regulation have affected the delivery and receipt of medical services. At the end of the course students will: 1) know the history of important Medicare policy changes; 2) be able to construct aggregated patient case mix acuity adjusted measures of provider quality using insurance claims data; 3) be able to conduct policy analyses using Medicare claims data that are sensitive to standardized coding schemes. Enrollment limited to 15 graduate students. Prerequisite: PHP 2120, 2508, or 2510. Instructor permission required.
Fall PHP2410E S01 16474 Th 12:00-2:30 (V. Mor)

PHP 2425. Doing Public Health: Getting It Done in the Real World.
This course covers topics that MPH graduates will encounter in public health work and engages students with important challenges in public health practice. Class sessions will be as real-world as possible. We will choose a major current public health problem in RI and develop a coalition of agencies. Each student will learn about a different agency, develop its role in addressing the problem as a part of the coalition, and design a proposal for intervention, interacting with experienced public health practitioners, interviewing agency staff, gathering data, writing proposals, drafting budgets etc. Assignments will foster good communication within organizations and coalitions.
Fall PHP2425 S01 16475 T 3:00-5:30 (P. Nolan)

PHP 2450. Measuring and Improving the Quality of Health Care.
The quality of health care in the United States is in urgent need of improvement. This course will focus on the science of measuring and improving the quality of health care. Topics will include quality assessment, patient safety, medical errors, public reporting, financial incentives, organizational change, and health care disparities. Students will engage in a team-based quality improvement project. Open to graduate and medical students only.
Fall PHP2450 S01 16479 M 3:30-6:00 (A. Trivedi)

PHP 2451. Exchange Scholar Program.
Fall PHP2451 S01 15017 Arranged 'To Be Arranged'

PHP 2455A. Health Services Research Methods I.
Health services researchers use theories, models, and data to understand the health care system, assess the effectiveness of interventions (at multiple levels of the healthcare system), and inform health policy decisions. This course reviews the application of statistical and epidemiological principles to the design and analysis of health services research studies. The goal is to familiarize students with common study designs and methods in health services research, so that they can critically review the published literature and use these approaches in their own research.
Fall PHP2455A S01 16757 F 10:00-12:30 (I. Dahabreh)

PHP 2507. Biostatistics and Applied Data Analysis I.
The objective of the year long, two-course sequence is for students to develop the knowledge, skills and perspectives necessary to analyze data in order to answer a public health question. The year long sequence will focus on statistical principles as well as the applied skills necessary to answer public health questions using data, including: data acquisition, data analysis, data interpretation and the presentation of results. Through lectures, labs and small group discussions, this fall semester course will focus on identifying public health data sets, refining research questions, univariate and bivariate analyses and presentation of initial results. Prerequisite: understanding of basic math concepts and terms; basic functional knowledge of Stata. Enrollment limited to 50 MPH, CTR, and BSSI students. Instructor permission required.
Fall PHP2507 S01 16480 W 6:00-8:00PM (A. Gjelsvik)
Fall PHP2507 S01 16480 Th 1:00-2:20 (A. Gjelsvik)

PHP 2508. BioStatistics and Data Analysis II.
Biostatistics and Applied Data Analysis II is the second course in a year-long, two-course sequence designed to develop the skills and knowledge to use data to address public health questions. The courses are specifically for students in the Brown MPH program, and the training programs in Clinical and Translational Research. The sequence is completed in one academic year, not split across two years. The courses focus on statistical principles as well as the applied skills necessary to answer public health questions using data, including: acquisition, analysis, interpretation and presentation of results. Prerequisite: PHP 2507. Enrollment limited to 46. Instructor permission required.
Spr PHP2508 S01 25501 W 6:00-8:00PM (A. Gjelsvik)
Spr PHP2508 S01 25501 Th 1:00-2:20 (A. Gjelsvik)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PHP 2510. Principles of Biostatistics and Data Analysis. Intensive first course in biostatistical methodology, focusing on problems arising in public health, life sciences, and biomedical disciplines. Summarizing and representing data; basic probability; fundamentals of inference; hypothesis testing; likelihood methods. Inference for means and proportions; linear regression and analysis of variance; basics of experimental design; nonparametrics; logistic regression. Open to advanced undergraduates with permission from the instructor.

PHP 2511. Applied Regression Analysis. Applied multivariate statistics, presenting a unified treatment of modern regression models for discrete and continuous data. Topics include multiple linear and nonlinear regression for continuous response data, analysis of variance and covariance, logistic regression, Poisson regression, and Cox regression. Prerequisite: APMA 1650 or PHP 2510. Open to advanced undergraduates with permission from the instructor.

PHP 2515. Fundamentals of Probability and Statistical Inference. This course will provide an introduction to probability theory, mathematical statistics and their application to biostatistics. The emphasis of the course will be on basic mathematical and probabilistic concepts that form the basis for statistical inference. The course will cover fundamental ideas of probability, some simple statistical models (normal, binomial, exponential and Poisson), sample and population moments, nite and approximate sampling distributions, point and interval estimation, and hypothesis testing. Examples of their use in modeling will also be discussed. 

PHP 2520. Statistical Inference I. First of two courses that provide a comprehensive introduction to the theory of modern statistical inference. PHP 2520 presents a survey of fundamental ideas and methods, including sufficiency, likelihood based inference, hypothesis testing, asymptotic theory, and Bayesian inference. Measure theory not required. Open to advanced undergraduates with permission from the instructor.

PHP 2550. Practical Data Analysis. Covers practical skills required for successful analysis of scientific data including statistical programming, data management, exploratory data analysis, simulation and model building and checking. Tools will be developed through a series of case studies based on different types of data requiring a variety of statistical methods. Modern regression techniques such as cross-validation, bootstrapping, splines and bias-variance tradeoff will be emphasized. Students should be familiar with statistical inference as well as regression analysis. The course will use the R programming language.

PHP 2600. Thesis Preparation. This course will focus on the theory and applications of linear models for continuous responses. Linear models deal with continuously distributed outcomes and assume that the outcomes are linear combinations of observed predictor variables and unknown parameters, to which independently distributed errors are added. Topics include matrix algebra, multivariate normal theory, estimation and inference for linear models, and model diagnostics. Prerequisites: APMA 1650 or 1660, or taking PHP 2520 concurrently.

PHP 2602. Analysis of Lifetime Data. Comprehensive overview of methods for inference from censored event time data, with emphasis on nonparametric and semiparametric approaches. Topics include nonparametric hazard estimation, semiparametric proportional hazards models, frailty models, multiple event processes, with application to biomedical and public health data. Computational approaches using statistical software are emphasized. Prerequisites: PHP 2510 and 2511, or equivalent. Open to advanced undergraduates with permission from the instructor.

PHP 2610. Causal Inference and Missing Data. Systematic overview of modern statistical methods for handling incomplete data and for drawing causal inferences from “broken experiments” and observational studies. Topics include modeling approaches, propensity score adjustment, instrumental variables, inverse weighting methods and sensitivity analysis. Case studies used throughout to illustrate ideas and concepts. Prerequisite: MATH 1610 or PHP 2511.

PHP 2950. Doctoral Seminar in Public Health. The purpose of this seminar is to facilitate discussions of current scientific literature in epidemiology, biostatistics, health services, behavioral and health sciences, and public health in general. The main goal is to expose students to current methodological issues and controversies, in an effort to integrate knowledge across disciplines. This seminar is only open to doctoral students in Epidemiology, Behavioral and Social Health Sciences, Biostatistics and Health Services Research.

PHP 2990. Thesis Preparation. This optional half credit course may be taken up to two times during preparation for the MPH degree. It provides MPH students with self-directed thesis research and preparation time under the guidance of a thesis advisor. Prior to taking this course the student and advisor must reach agreement as to what constitutes satisfactory completion of the course (e.g., completion of a satisfactory literature review, attainment of specific thesis benchmarks, or completion of the thesis). Please check Banner for the correct section number and CRN to use when registering for this course.


PHP XLIST. Courses of Interest to Concentrators in Community Health. Comprehensive overview of methods for inference from censored event time data, with emphasis on nonparametric and semiparametric approaches. Topics include nonparametric hazard estimation, semiparametric proportional hazards models, frailty models, multiple event processes, with application to biomedical and public health data. Computational approaches using statistical software are emphasized. Prerequisites: PHP 2510 and 2511, or equivalent. Open to advanced undergraduates with permission from the instructor.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
PLCY 1910. Social Entrepreneurship.
This course introduces students to social innovation and social entrepreneurship and engages them in identifying significant issues, problems, tools, strategies and models that drive bold solutions to complex contemporary problems. Enrollment limit is 40. Submit by 5pm on Friday, September 9, 2016 a required application here: http://goo.gl/forms/tjUKSxwXc4 You must attend the first class on Thursday, September 8, 2016. Accepted students will be notified on September 12. Students who do not attend the second class on Tuesday, September 13th will forfeit their spot in class.
Fall PLCY1910 S01 16792 TTh 10:30-11:50(13) (A. Harlam)

PLCY 1970. Independent Reading and Research.
Supervised reading or research. Specific program arranged in terms of the student's individual needs and interests. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

PLCY 1971. Independent Reading and Research.
See Independent Reading And Research (PPAI 1970) for course description. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

PLCY 1990. Public Policy Colloquium.
An advanced two-semester research seminar for senior honors candidates in the public policy and American institutions concentration. Participants jointly consider strategies appropriate to researching and writing a senior paper before proceeding to individual research on topics they choose. Each participant is required to present a summary of his or her work to the colloquium.
Fall PLCY1990 S01 16793 W 12:00-1:30 'To Be Arranged'

PLCY 2035. Statistics II for Public Policy Analysis.
The course introduces students to the use of multiple regression analysis and causal inference for analyzing data in the social sciences. We will study a variety of designs for empirical public policy analysis, from random assignment to quasi-experimental evaluation methods, and students will have the opportunity to analyze actual datasets. We will also study the strengths and weaknesses of various causal inference strategies.
Please note that students must be present at the first class meeting in order to be have the option to enroll in this course. They must have downloaded Stata 14 (available free of charge through software.brown.edu) and picked up and registered their iClicker on Canvas (see syllabus for details). Because the class meets once per week and the first assignment will be distributed during the first class, we will be launching directly into substantive material for the course. Week one/ meeting one is not only an introduction. It is therefore essential that all students attend beginning from the first class meeting on 9/8/2016.
Fall PLCY2035 S01 16796 Th 4:00-5:30(04) (J. Owens)

Broad overview of public policy analysis and program evaluation with emphasis on methodological issues involved in the analysis and assessment of government programs. Illustrations are drawn from a variety of substantive policy areas.
Fall PLCY2040 S01 16795 TTh 1:00-2:20(10) (Y. Neggens)

PLCY 2450. Exchange Scholar Program.
Fall PLCY2450 S01 15022 Arranged 'To Be Arranged'

PLCY 2980. Graduate Independent Study.
Please check Banner for the correct section number and CRN to use when registering for this course.

Religious Studies

Contemplative Studies

COST 0040. Great Contemplative Traditions of Asia.
Introduction to the critical study of contemplative practices and experiences emphasizing philosophical and scientific analyses of works from the major Asian contemplative traditions of South and East Asian Buddhism and Chinese Daoism in historical context. Theoretical studies of mysticism and studies from the psychological sciences will be included. Additional weekly meditation lab section.
Fall COST0040 S01 16428 TTh 2:30-3:50(03) (H. Roth)

COST Individual Study Project Semester 1, directed reading and research arranged with individual faculty. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

COST Individual Study Project Semester 2, directed reading and research arranged with individual faculty. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Enables concentrators to synthesize their knowledge of the field of Contemplative Studies and its current principal issues, and learn how to most effectively conduct research and writing on their Capstone Projects. Students will write their Capstone Individual Research Project in this course under the direction of their Capstone Advisor, in most cases a member of the Contemplative Studies Core Faculty. Students accepted to pursue Honors will use this course as the first semester of a two-semester Honors sequence. The second semester will be an independent reading and research course with their Honors Advisor.
Fall COST1950 S01 15390 W 3:00-5:30(17) (H. Roth)

Required of seniors in the honors program, (second semester of two-semester sequence that includes COST 1950 in first semester). Open to others only by permission of the Director. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Religious Studies

RELS 0015. Sacred Stories.
What do stories do? How do stories underlie who we are, where we are, or why our world is as it is? Ancient religious stories have been formative for western culture in all of its expressions, lasting into our modern, secularized times. Sacred stories underlie how we think about life, death, suffering, or joy. How do they work? This course will examine narrativity - the telling, sharing, and contesting of stories - as a means for constructing and maintaining religious identity, community, and world view in western history, Jewish, Christian, and Muslim materials. Lecture and discussion. DPLL WRIT
Fall RELS0015 S01 24334 MWF 12:00-12:50(05) (S. Harvey)

Was Christianity founded as a religion of liberation or oppression? Was early Christian scripture always a “contested site”? Who were the winners and losers of this competition and why? This course aims to answer these questions by providing a historical overview and analysis of the early Christian movement and its literature, including both canonical and noncanonical texts. The purpose is to critically engage these writings in order to understand the practices, beliefs, and experiences of the early communities that produced them. By reconstructing these ancient frameworks, students will gain better context for understanding the contemporary deployment of biblical texts. WRIT
Fall RELS0022 S01 16708 TTh 9:00-10:20(08) (N. DesRosiers)
RELS 0040. Great Contemplative Traditions of Asia
Introduction to the critical study of contemplative practices and experiences emphasizing philosophical and scientific analyses of works from the major Asian contemplative traditions of South and East Asian Buddhism and Chinese Daoism in historical context. Theoretical studies of mysticism and studies from the psychological sciences will be included. Additional weekly meditation lab section.
Fall RELS0040 S01 15421 TTh 2:30-3:50(03) (H. Roth)

RELS 0050. Love: The Concept and Practice.
A study of love (in classical and modern texts and in film) that provides a window into a host of religious, philosophical, and ethical issues. Topics include the potential conflict between divine and human love, between transcendent and earthly love, and the nature of friendship, romance, marriage, and love at the crossroads. Although the scope is love in the West, the Kamasutra and other texts furnish a comparative component.
Fall RELS0050 S01 15382 MWF 1:00-1:50(06) (M. Cladis)

When someone calls themselves "spiritual," what does that mean? This course answers that question by exploring the wide range of ideas, practices, and desires that have come to make up the concept of spirituality. Inviting students to consider why spirituality seems "not religious," this course examines such phenomena as yoga, faith healing, hip hop, shopping, self-help books, psychology, surveys, and protest movements. Through such phenomena, this course will enable students to recognize how Americans have made sense of their own lives and institutional attachments through continually changing technologies of race, pluralism, science, capitalism, and secularism. DPLL WRIT
Spr RELS0056 S01 24335 MWF 10:00-10:50(03) (D. Vaca)

RELS 0058. Christianity and Culture.
The aim of this introductory level lecture course is to interrogate the relationship between culture and religion. The foundation for our study will be exemplary works by major cultural critics and theologians since the early 19th century. Our focus will be on forms of cultural criticism put forward by interdisciplinary thinkers that attempted to gain a better grasp of both modern social crises and sources of communal joy. The course shall rehearse debates in cultural studies, theology, postmodernism, and politics.
Spr RELS0058 S01 24336 MWF 2:00-2:50(07) (A. Willis)

RELS 0068. Religion and Torture.
The debates about the moral and legal status of torture have acquired a new urgency since 9/11. People are now questioning the consensus of law and human rights declarations that torture is never permissible. Indeed, some argue that in extreme cases, it may be obligatory to torture a captive for information that could save many lives. This class explores the recent debates about torture from secular and religious perspectives. It also deals with more general themes related to torture: What are the nature and effects of pain? Are human beings sacred, and does sacredness involve a prohibition against torture? WRIT
Spr RELS0068 S01 24337 MWF 1:00-1:50(06) (S. Bush)

RELS 0075. Blues People: Topics in African American Religion and Culture.
African American religious practices and cultural expressions have been a significant force in American culture and a sustaining force for African-Americans. Some have argued there is nothing distinctive about African-American cultures, others contend that African American religion is merely a response and a regurgitation of European forms of Christianity, while others have erected strict boundaries about what does and does not constitute black culture and religion. This introductory course will investigate what constitutes African American religion and culture, the social and political impact of African American religion and culture, and their relationship, among other things. DPLL
Fall RELS0075 S01 16088 MW 3:00-4:20(17) (A. Willis)

This course is an introduction to Japanese cultural and aesthetic traditions as represented in literature, the fine arts, gardening, tea practice, and selected martial arts. Readings include translations of classic Japanese works of literature and aesthetic theory, as well as modern interpretive and historical scholarship. Audiovisual materials are used to supplement the readings whenever feasible. Students who have no previous exposure to Japanese studies are welcome; there are no prerequisites. The format of the course is a combination of lecture and discussion. DPLL
Fall RELS0080 S01 16432 TTh 1:00-2:20(10) (J. Sawada)

RELS 0085C. Foreigners, Refugees, and the Ethics of Minority (JUDS 0061).
Interested students must register for JUDS 0061.
Spr RELS0085C S01 25531 Arranged "To Be Arranged"

RELS 0088. Judaism, Christianity, and Islam.
A survey of the history and major beliefs and rituals of Judaism, Christianity, and Islam, with special attention to issues of contemporary concern. Will serve also to introduce basic methods for studying religion in an academic context. DPLL
Fall RELS0088 S01 15383 MWF 2:00-2:50(07) (M. Satlow)

RELS 0090K. Christmas in America.
This course explores how Christmas became a religious, consumer, and social extravaganza. Every year, many Americans devote several months to preparing for and recovering from Christmas. Most participate as Christians, but others participate despite other religious identities. Yet Christmas has not always loomed so large. Through encounters with such phenomena as sacred stories, consumer practices, and legal controversies, this course invites students to ask how and why Christmas became an important event. By the end of the course, students not only will recognize how religion and culture take shape together but also will appreciate how popular practices develop. FYSS WRIT
Fall RELS0090K S01 15384 M 3:00-5:30(15) (D. Vaca)

RELS 0090L. Pilgrimage and Quest.
An exploration of pilgrimage broadly conceived, encompassing devotional visits to revered sites, personal travel quests, and literary or imagined journeys. Emphasis on the ritual dimension of specific pilgrimages across cultures, as well as the transformative effects of the travel process itself. Some consideration of relations between pilgrimage and tourism. Materials include historical and anthropological records as well as biographical, fictionalized, and poetic accounts. FYSS
Fall RELS0090L S01 16707 W 3:00-5:30(17) (J. Sawada)

RELS 0096. Islamic Cosmologies.
How have Muslims understood the natural and social world that forms the backdrop for human lives? We will use this question to chart a variety of Islamic perspectives pertaining to thought and action. Topics include: worldviews contained in the Quran and other early Islamic materials; formal cosmologies that reflect continuity with late antique ideas; mystical thought pertaining to Sufis and Shi'is; reflection on politics and ethics; impact of modern science; and contemporary perspectives concerning the environment, gender, race, and class. No prerequisites or presumption of prior knowledge regarding the subject.
Spr RELS0096 S01 24912 TTh 10:30-11:50(09) "To Be Arranged"

RELS 0100. Introduction to Buddhism.
From its beginnings to the 21st century. Principal teachings and practices, institutional and social forms, and artistic and iconographical expressions. Spr RELS0100 S01 24338 MWF 11:00-11:50(04) (J. Protass)

RELS 0155. Islam in South Asia.
A survey of Muslim presence in South Asia. We will trace historical development of communities, including the arrival of Muslims in the subcontinent, establishment of various polities in the medieval period, and the evolution of modern colonial and postcolonial states. Paying attention to religious ideas, literary expression in numerous languages, and art and architecture, we will treat Islam as a multidimensional factor embedded within diverse South Asian intellectual and cultural contexts. Readings include original materials in translation and academic studies from various humanities and social science fields.
Spr RELS0155 S01 24913 TTh 6:40-8:00PM(18) "To Be Arranged"
RELS 0326. How the Bible Became Holy (JUDS 0682).
Interested students must register for JUDS 0682.
Spr RELS0326 S01 25533 Arranged "To Be Arranged"

RELS 0560. Tao of Abraham: Muslims and Christians in China.
Examining the long history and current politics of Islam and Christianity in China, this class on Chinese religions goes beyond Buddhism, Daoism, and Confucianism. We will de-center notions of Islam away from the Arab world and focus on alternate centers of Islam in Asia. Through reading histories of Christianity that revolve around China, we open our eyes to how religions can transform societies while being transformed by them. Discussion topics include identity, nationalism, women's spaces, masculinity, poetry, a Chinese Sufi mystical text, international travel, political rebellion, and manga. All texts in English. Course culminates in a final research paper.
Fall RELS0560 S01 15553 TTh 10:30-11:50(13) (J. Protass)

RELS 0590. Saints, Hermits, and Journeys in East Asia.
This course explores the journeys of holy persons in religious traditions and literatures of East Asia. Students will read classics from China's traditions of Confucianism, Daoism, and Buddhism, and will work together to develop critical skills for reading religious literature. Readings include timeless narratives as well as modern interpretations in manga and digital media. Students will be confronted with strange and unfamiliar worlds, challenged to enter into ancient texts, and instructed how to identify genres, literary techniques, and expressions of religious ideals. All readings available in English translation. The course concludes with a creative final project or research project.
Spr RELS0590 S01 24339 M 3:00-5:30(13) (J. Protass)

RELS 0600C. Radical Islam: Significant Moments in Contemporary Media.
This course studies the phenomenon of radical Islam through the lens of contemporary media. We will explore related issues including the nature and roots of militant Islamist violence in the contemporary world and learn about historical contexts, theoretical structures, and detailed comparative case studies. We will explore self-styled modern Islamist and “jihadist” movements, such as ISIS, reporting on domestic and international terrorism, and a variety of political contexts. In addition to scholarship, a large component of this course will be about analyzing a variety of modern media pieces, and the ways in which terrorism and radical Islam feature in the news. DPLL WRIT Fall RELS0600CS01 15385 TTh 1:00-2:20(10) (N. Khalek)

RELS 0880C. Race, Religion, and the Secular (JUDS 0603).
Interested students must register for JUDS 0603.
Fall RELS0880CS01 16815 Arranged "To Be Arranged"

Intensive introduction to classical and contemporary theories of religion and the principal methods for the study of religion. Junior seminar for religious studies concentrators. Enrollment limited to 25. WRIT Fall RELS1000 S01 15386 W 3:00-5:30(17) (P. Nahme)

Interested students must register for JUDS 1635.
Fall RELS1050 S01 16816 Arranged "To Be Arranged"

RELS 1325D. Byzantine Desires.
Relationality, sexuality, and the quest for holiness in Byzantine Christianity. How did the Byzantines understand human relationships as instrumental in the human advancement towards God? How did they utilize desire as an ontological aspect of embodiment? What sorts of relationships, lived in what kinds of social arrangements, enabled pursuit of human-divine union? Seminar. WRIT Spr RELS1325DS01 25226 Arranged (S. Harvey)

RELS 1375. Heidegger, the Jews, and the Crisis of Liberalism (JUDS 1614).
Interested students must register for JUDS 1614.
Spr RELS1375 S01 25532 Arranged "To Be Arranged"

RELS 1380A. Money, Media, and Religion.
This course explores the relationship between religious life, forms of capitalism, and media technologies in the history of the United States. From constructing buildings and printing texts to disseminating teachings and communicating with members: essential aspects of religious life require both money and media. Yet forms of money and media continually have changed, and those changes have taken shape in dialogue with religious beliefs, practices, and sensibilities. This seminar examines this dialogue by visiting such varied sites as Puritan marketplaces, Santa Claus displays, Bible factories, television talk shows, and Occupy protests. DPLL Spr RELS1380A S01 24341 M 3:00-5:30(13) (D. Vacca)

RELS 1435. Buddhism in Motion.
This advanced seminar examines Buddhism as it moves across the edges of China. Telling histories of Buddhism in motion will challenge us to reimagine the encounters between the Indian Buddhist religion and native Chinese cultures. After reviewing foundational works in the field, including theories of cultural translation, we engage recent studies of Chinese Buddhism that focus on interstices, borders, and contact zones; examine sources for the study of Chinese Buddhism from cross-cultural perspectives, including objects, emigrants, medicine, and bathing practices; and practice critical thinking about how we talk about Chinese Buddhism when the object of study is in motion.
Fall RELS1435 S01 16433 Th 4:00-6:30(04) (J. Protass)

RELS 1530D. Islamic Sectarianism.
Sunni and Shi'i conflict and sectarian division have been an enduring issue in the Islamic world. From Iraq to Syria, Iran to Egypt, inter-Muslim conflict and conflicting ideologies seem to be central issues. But how accurate and historical is this impression? In this course, we examine the origins and evolution of Islamic sectarianism, with an emphasis on the politics of religious authority in the Islamic world, old and new. This is an upper level seminar, and juniors and seniors will be given preference for enrollment. Shoppers must attend the first day of class if they wish to enroll. DPLL Spr RELS1530DS01 24342 Th 4:00-6:30(17) (N. Khalek)

RELS 1600A. Religion and Sexuality (JUDS 1650).
Interested students must register for JUDS 1650.
Fall RELS1600A S01 16817 Arranged "To Be Arranged"

RELS 1760. Religion and Suspicion.
Religion has arguably been the classical locus of suspicious models of interpretation. Social and critical theorists from Marx to Foucault have argued that we only understand what religion really does if we interpret it with suspicion—if we refuse to take its claims at face value. Others have sought to redirect suspicion back against suspicion itself, and religious thinkers have sought to incorporate critiques of religion into their own theological projects. This seminar studies key figures in this complex interplay of religion and suspicion. Likely readings from Foucault, Marx, Nietzsche, Barth, Horkheimer, Adorno, Gadamer, Foucault, Said, Gutiérrez, Schüssler-Fiorenza, and Butler. Enrollment limited to 20.
Spr RELS1760 S01 24344 T 12:00-2:30 (T. Lewis)

RELS 1990. Individual Study Project.
Directed reading and research arranged with individual faculty. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Required of seniors in the honors program. Open to others only by permission of the chair of the department. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

Critical examination of major approaches to the study of religion, especially those of the anthropology and the history of religions, with attention to issues in current debate.
Fall RELS2000 S01 15387 T 12:00-2:30 (T. Lewis)
Survey of Ugaritic grammar followed by readings in mythic and epic literature (e.g. the Baal Cycle, Kirta, Aqhat) and ritual texts. Prerequisite: Knowledge of the grammar of one Semitic language. Open to graduate students only.
Fall RELS2100F S01 15388 M 5:30-8:00PM (S. Olyan)

The seminar will explore the central radical religious, democratic, and environmental dispositions and ideologies that mutually informed each other in eighteenth- and nineteenth-century British Romantic literature and their subsequent and sustained legacies in America. We will read such authors as William and Dorothy Wordsworth, Coleridge, Mary Shelley, Emerson, and Thoreau.
Spr RELS2110A S01 24345 W 3:00-5:30PM (M. Cladis)

RELS 2450. Exchange Scholar Program.
Fall RELS2450 S01 15027 Arranged 'To Be Arranged'

RELS 2600D. Pragmatism and Religion.
Readings in the original pragmatists and their recent admirers with special attention to the topic of religion.
Spr RELS2600D S01 24346 Th 12:00-2:30 (S. Bush)

RELS 2600L. Seminar: Afro-Theism.
This graduate seminar places a theological lens on Black life in North America. Its premise is that Afro-Theism.s, not the institutional "Black Church" or Black prophetic religion, have been seminal to the self-conception of Black people and their way of constituting racial "others". Different theistic emphasis at different historical moments demonstrates both the importance and fluidity of Afro-Theisms and sheds unique light on quest for equity and self-actualization. Starting with the conventional Christian theologies into which New World Africans under slave conditions were indoctrinated, this course will explore the role and impact of Afro-Theisms.
Fall RELS2600L S01 15389 Th 12:00-2:30 (A. Willis)

RELS 2700. Historiography of Islam.
A critical appraisal of the field of Islamic history in light of issues in contemporary philosophy of history. We will discuss various ways in which 'Islam' has been imagined as an object of historical description and analysis. Topics include: historical thought generated by Muslims; relationship between historical projection and religious ideology; impact of contingent factors such as Mongol domination and modern colonialism; Orientalist views of the Islamic past; significance of narrative patterns, poetry, and modern historical fiction; and contemporary academic and popular trends. Intended for graduate students, with time devoted to materials in original languages (Arabic, Persian, and/or Urdu).
Fall RELS2700 S01 16144 M 3:00-5:30PM (A. Willis)

RELS 2890. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for preliminary examinations.
Fall RELS2890 S01 15028 Arranged 'To Be Arranged'
Spr RELS2890 S01 24045 Arranged 'To Be Arranged'

RELS 2910. Independent Research.
The staff is willing to offer independent reading courses in selected areas. See the Instructor for more information. Please check Banner for the correct section number and CRN to use when registering.
Fall RELS2910 S01 15029 Arranged 'To Be Arranged'

RELS 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall RELS2990 S01 15029 Arranged 'To Be Arranged'
Spr RELS2990 S01 24046 Arranged 'To Be Arranged'

Renaissance and Early Modern Studies
RELS 1980. Independent Study in REMS.
Tutorial instruction on a topic in the Renaissance or early modern period, supervised by a member of the core faculty. This number may be used by concentrators for the required Independent Project undertaken in the junior or senior year. Section numbers vary by professor; instructor permission required.
RELS 2130. Au-delà de l'Europe: La France et le monde au XVIIe siècle (FREN 2130H).
Interested students must register for FREN 2130H.
Fall RELS2130 S01 16393 Arranged 'To Be Arranged'

Science and Society
SCSO 1000. Introduction to Science and Society: Theories and Controversies.
What is "science"? How do scientific ideas become knowledge? What is the nature of scientific objectivity, how can it be compromised? What is a scientific community, scientific consensus, and scientific authority? What roles does science play in our culture, and how is science related to other social institutions and practices? The interdisciplinary field of science studies is introduced through exploration of topics that include: gender and race, psychiatric classification, the drug industry, science and religion, and the use of nuclear weapons during World War II. Enrollment limited to 30 sophomores, juniors, seniors; others may enroll with permission of instructor. WRIT
Spr SCSO1000 S01 24193 TTh 10:30-11:50PM (J. Richards)

Independent reading and research work in Science and Society is available to students who have completed introductory and intermediate level work in Science and Society. A decision to enroll must be made via consultation with the concentration advisor and the faculty advisor for the course. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Prerequisite: SCSO 1400. Open to junior and senior concentrators in Science and Society; instructor permission required.

Independent reading and research work in Science and Society is available to students who have completed introductory and intermediate level work in Science and Society. A decision to enroll must be made via consultation with the concentration advisor and the faculty advisor for the course. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course. Prerequisite: SCSO 1400. Open to junior and senior concentrators in Science and Society; instructor permission required.

Slavic Languages
Czech
CZCH 0100. Introductory Czech.
Introduces the performance of basic tasks in Standard Czech, highlights of Czech culture, and a worldview of a nation uniquely located on the threshold of western and eastern Europe. Emphasis on oral communication. Five meetings per week and use of audio/visual materials. Enrollment limited to 18.
Fall CZCH0100 S01 15149 Arranged (M. Fidler)

CZCH 0320A. Czech Animation: Cross-cultural Dialogs.
Czech animation has a long tradition and international reputation. Jiří Trnka beat Walt Disney at the post-war Cannes Film Festival. Karel Zeman is a pioneer in creating fantasy films with animation. Surrealist films by Jan Švankmajer continue to shock the audience. Younger animators such as Barta, Klimt, and Pospíšilová have been developing new modes of expression after the fall of socialism. This course explores a variety of Czech animated films from the 1960s to the 21st century and its cross-cultural dialog, especially with the Japanese anime. Readings in English and films with English subtitles. DPLL FYS WRIT
Spr CZCH0320A S01 24133 Arranged (M. Fidler)
Spr CZCH0320AAS02 24134 Arranged (M. Fidler)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**CZCH 0410D. Czechs and the Big Brother: Czech Lands in the 1980s.**

Events in Czechoslovakia in the late 1980’s as represented in the Oscar-winning film Kolja. The Velvet Revolution and the Czech perspective on Russia. Readings from different genres. Equal emphasis on language acquisition, including Colloquial Czech. Separate language tasks for two proficiency levels (2nd-3rd year). Conducted in Czech. For students who have completed CZCH 0200 or the equivalent. Enrollment limited to 18.

**Fall CZCH0410D S01 15150 Arranged (M. Fidler)**

**CZCH 0610B. Psychosis of Occupation in the Czech Lands.**

Discussion of the Occupation period during WWII. The course is built around a Czech New Wave classic film about an eccentric director of a crematorium in Prague, who turns into a fanatic collaborator under the terror and demagogy of the regime. We will also read excerpts from the original literary text on which the film was based, and work with the Czech National Corpus. Separate language tasks given to students of two proficiency levels (2nd, 3rd year). Conducted in Czech. The course is for students who completed CZCH0410 or the equivalent. Enrollment limited to 18.

**Spr CZCH0610BES S01 24135 Arranged (M. Fidler)**

**Polish**

**PLSH 0100. Introductory Polish.**

Introduction to Polish language and culture. Oral and written communication in Polish; emphasis on the literary and everyday culture of Poland. Five meetings per week, plus use of audio, video, and web materials.

**Fall PLSH0100 S01 15169 TTh 12:00-12:50(14) (M. Harrison)**

**Fall PLSH0100 S01 15169 MWF 10:00-10:50(14) (M. Harrison)**

**PLSH 0200. Introductory Polish.**

Introduction to Polish language and culture. Oral and written communication in Polish; emphasis on the literary and everyday culture of Poland. Five meetings per week, plus use of audio, video, and web materials.

**Spr PLSH0200 S01 24161 TTh 12:00-12:50(03) (M. Harrison)**

**Spr PLSH0200 S01 24161 MWF 10:00-10:50(03) (M. Harrison)**

**PLSH 0300. Intermediate Polish.**

This course is for students who have completed first-year Polish. In this course you will further develop skills in speaking, reading, writing and understanding Polish. By the end of this course, you will be able to carry on basic conversations in Polish on many topics from your daily life. You will be able to write notes and simple letters to Polish friends or keep a journal in Polish. You will also have the skills to read basic texts. Enrollment limited to 18.

**Fall PLSH0300 S01 15170 TTh 1:00-1:50(16) (M. Harrison)**

**Fall PLSH0300 S01 15170 MWF 11:00-11:50(16) (M. Harrison)**

**PLSH 0400. Intermediate Polish.**

This course is designed for students who have completed the Introductory Polish language sequence (PLSH 0150/0100, 0200 and 0300) or have otherwise acquired basic proficiency required for the second year sequence. In this course you will continue to develop and refine your speaking skills and will be able to carry on conversation on many topics from your daily life. You will continue developing reading and writing skills by reading increasingly more elaborate authentic texts and writing essays, and your listening skills will be cultivated by in-class interactions and listening to authentic Polish audio and video recordings.

**Spr PLSH0400 S01 24162 TTh 1:00-1:50(04) (M. Harrison)**

**Spr PLSH0400 S01 24162 MWF 11:00-11:50(04) (M. Harrison)**

**PLSH 0500. Advanced Polish.**

This course is designed for students who have completed the Introductory and Intermediate Polish language course sequence – PLSH 0100, 0200, 0300, and 0400, or have otherwise acquired basic proficiency required for the third year sequence.

In this course the students will further develop skills in speaking, reading, writing and understanding Polish. They will continue developing speaking, reading, and writing skills by reading and discussing increasingly more elaborate authentic texts and writing essays, and their listening skills will be cultivated by in-class interactions and listening to authentic Polish audio and video recordings.

**Fall PLSH0500 S01 15171 MWF 1:00-1:50(06) (M. Harrison)**

**PLSH 0600. Advanced Polish.**

In this course students will further develop their skills in speaking, reading, writing and understanding Polish. They will continue developing reading and writing skills by reading increasingly more elaborate authentic texts, writing essays, and learning about Polish stylistics, syntax, and grammar at the advanced level. Their listening skills will be cultivated by in-class interactions and listening to authentic Polish audio and video recordings. Emphasis in this course will be on mastering oral expression and vocabulary building, as well as comprehension of fiction and non-fiction texts of a moderate level of difficulty. The course will be conducted almost exclusively in Polish.

**Spr PLSH0600 S01 24163 MWF 1:00-1:50(06) "To Be Arranged" (M. Harrison)**

**PLSH 1150. Polish for Reading Knowledge.**

This course is designed for advanced undergraduates (or graduate students), who wish to develop reading competence in Polish with the aid of a good dictionary. Using texts from various disciplines in the social sciences and humanities, as well as journalistic and technical writings, students will learn the fundamentals of grammar and syntax, and how to decipher the meaning of a text, proceeding from very basic to more and more complex readings. Students will acquire a basic reading vocabulary and understanding of Polish grammar through analytical discussion, grammar exercises, and extensive reading of selected texts in the field of individual students.

**Fall PLSH1150 S01 15172 TTh 9:00-11:00 (M. Harrison)**

**Russian**

**RUSS 0100. Introductory Russian.**

Introduction to Russian language and culture. Oral and written communication in Russian; emphasis on the literary and everyday culture of Russia and the former U.S.S.R., including the changes that have reshaped everyday life for citizens of Russia. Five meetings per week, plus use of audio, video, and web materials. Enrollment limited to 18.

**Fall RUSS0100 S01 15369 MWF 9:00-9:50(01) (L. deBenedette)**

**Fall RUSS0100 S01 15369 TTh 12:00-12:50(01) (L. deBenedette)**

**Fall RUSS0100 S02 15370 MWF 11:00-11:50(16) (L. deBenedette)**

**Fall RUSS0100 S02 15370 TTh 11:00-11:50(16) (L. deBenedette)**

**Fall RUSS0100 S03 15371 MWF 12:00-12:50(12) (L. deBenedette)**

**Fall RUSS0100 S03 15371 TTh 12:00-12:50(12) (L. deBenedette)**

**RUSS 0110. Intensive Russian.**

Intensively-paced introduction to Russian culture and language; completes one year of study in one semester (RUSS 0110 = RUSS 0100-0200). Comprehension and use of contemporary Russian; fundamentals of Russian grammar; vocabulary acquisition; focus on oral communication. Introduces aspects of everyday culture of Russia and the former U.S.S.R. Ten to fifteen hours weekly work outside the classroom. Enrollment limited to 18.

**Spr RUSS0110 S01 24325 MTWThF 12:00-12:50(03) (L. deBenedette)**

**Spr RUSS0110 S01 24325 MWF 10:00-10:50(03) (L. deBenedette)**

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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
RUSS 0200. Introductory Russian.
Introduction to Russian language and culture. Oral and written communication in Russian; emphasis on the culture of Russia and the former U.S.S.R., including the changes that have reshaped everyday life for citizens of Russia. Five meetings per week, plus use of audio, video, and Web materials. Prerequisite: RUSS 0100 or RUSS 0250. Enrollment limited to 18.
Spr RUSS0200 S01 24326 MWF 9:00-9:50(02) (L. deBenedette)
Spr RUSS0200 S02 24327 MWF 11:00-11:50(04) (L. deBenedette)

RUSS 0300. Intermediate Russian.
Continues development of language proficiency while broadening understanding of contemporary Russian culture via readings in literature and history. Expansion of vocabulary for dealing with conversational topics and review of Russian grammar. Features literary and nonliterary readings in Russian, as well as video and computer resources. Five class meetings per week. Prerequisite: RUSS 0110 or RUSS 0200 or RUSS 0250 or placement by exam. Enrollment limited to 18.
Fall RUSS0300 S01 15372 MWF 10:00-10:50(14) (L. deBenedette)
Fall RUSS0300 S02 15373 MWF 11:00-11:50(16) (L. deBenedette)

RUSS 0320E. Crime and Punishment through Literature.
The seminar will explore how texts of different epochs and cultures, ranging from Ancient to Modern and from drama to poem, novel, and film treat the issues of transgression, punishment, justice, and forgiveness. We will examine each text both in terms of its artistic merit and its place within its cultural and historical milieu. Enrollment limited to 20 first-year students.
FYS WRIT
Fall RUSS0320E S01 15160 Th 4:00-6:30(04) (V. Golstein)

RUSS 0400. Intermediate Russian.
Continues development of language proficiency while broadening understanding of Russian culture via readings in literature and history. Includes expansion of vocabulary for dealing with conversational topics and review of Russian grammar. Features literary and nonliterary readings in Russian, as well as video and computer resources. Five class meetings per week. Prerequisite: RUSS 0300 or placement by exam. Enrollment limited to 18.
Spr RUSS0400 S01 24328 MWF 10:00-10:50(03) (L. deBenedette)

RUSS 0500. Advanced Russian.
Examines selected topics in Russian culture and history as depicted in readings, the media, and Russian and Soviet films. Language work emphasizes increasing facility with spoken Russian and developing writing skills. Includes work on advanced grammar and syntax. Five class meetings per week. Prerequisites: RUSS 0350 or RUSS 0400 or placement. Enrollment limited to 18.
Fall RUSS0500 S01 15374 MWF 11:00-11:50(16) (L. deBenedette)

RUSS 1110. Special Topics in Russian Studies I: Advanced Reading and Conversation.
An advanced course recommended for students who are either planning to go or are returning from abroad. Focus on Russian culture as seen through the prism of Russian poetry. Extensive classroom discussion and frequent writing assignments. Prerequisite: RUSS 0500 or written permission. May be repeated once with permission from the instructor. Enrollment limited to 18.
Fall RUSS1110 S01 15163 MWF 12:00-12:50(12) (M. Oklot)

RUSS 1120. Special Topics in Russian Studies II: Advanced Reading and Conversation.
A continuation of Russian 1110. Examines aspects of Russian culture as manifested in Russian literature. Readings range from fairy tales to contemporary works. Extensive classroom discussion and frequent writing assignments. Prerequisite: RUSS 1110, 1700, or written permission. May be repeated once with permission of the instructor. Enrollment limited to 18.
Spr RUSS1120 S01 24331 MWF 12:00-12:50(05) (L. deBenedette)

RUSS 1200. Russian Fantasy and Science Fiction.
Survey of Russian literature, from fairy tales, utopias, and dream sequences to science fiction, which depict altered states of reality. Readings in English, supplemented with films in March and April. Seminar with emphasis on discussion. Russian concentrators and graduate students expected to cover most of the readings in Russian. Familiarity with Russian literary history is not required.
Spr RUSS1200 S01 24149 Th 10:30-11:50(09) (A. Levitsky)

RUSS 1290. Russian Literature in Translation I: Pushkin to Dostoevsky.
Survey of major works of Russian literature of the early and mid-19th century. Authors to be studied include Karamzin, Pushkin, Lermontov, Gogol, Turgeniev, Leskov, and Dostoevsky. Lectures and discussion. No knowledge of Russian required. Discussion sections to be arranged. WRIT
Fall RUSS1290 S01 15145 Th 10:30-11:50(13) (L. deBenedette)

RUSS 1340. The Russian Novel.
Mikhail Bulgakov's Master and Margarita, Andrei Bely's Petersburg, and Fedor Sologub's Petty Demon are read in depth as 20th-century milestones in the development of Russian novel—particularly as continuation and reaction to the prose of Nikolai Gogol and Fedor Dostoevski, which opens the course. Other authors included in the course: Nabokov, Platonov, Erofeev. In English.
Fall RUSS1340 S01 15159 MWF 2:00-2:50(07) (M. Oklot)

RUSS 1440. Imagining Moscow: Utopia and Urban Spaces in 20th-Century Russian Culture.
The course explores the role of Moscow in the Russian collective imagery throughout the 20th century. We will study how different utopian visions of the city in art, literature, film, and architecture affected the radical transformations of its urban landscape from the October Revolution to the present. We will start with the 1920s and 1930s, when the image of a new Moscow became closely associated with the creation of new socialist ways of life, and conclude with the neoliberal and neoimperialist facelift of the city in the post-Soviet period, retracing a history of 20th-century Russian culture through its urban imagination.
Fall RUSS1440 S01 16335 MWF 1:00-1:50(06) (F. Fenghi)

RUSS 1500. Approaches to Russian Literature.
Reading in Russian of selected poetry and prose by important authors, among them Lomonosov, Karamzin, Derzhavin, Pushkin, Lermontov, Tiutchev, Gogol, Fet, Dostoevsky, Chekhov, Briusov, Akhmatova, Sologub, Remizov, Blok, Bely, Zamiatin, Plinyak, and Mandelstham. Lectures in Russian on literary problems, literary terms, and important aspects of literary history. Prerequisites: RUSS 0600 plus RUSS 0290 or 0310 or written permission.
Spr RUSS1500 S01 24150 W 3:00-3:50(14) (A. Levitsky)

RUSS 1550. Beyond the Kremlin: Russian Culture and Politics in the Twenty-First Century.
This course explores the radical transformations of Russian cultural and political life after the end of the Soviet Union, with a specific focus on the Putin era. By combining the approaches of literary analysis and cultural anthropology, the course studies representations of social change, and attempts at producing social change, in Russian everyday life and language, as well as in contemporary art and literature. All readings and discussions in English, with Russian originals available for interested students. WRIT
Spr RUSS1550 S01 25422 MWF 2:00-2:50(07) (F. Fenghi)
RUSS 1660. Sexuality and Revolution in 20th-Century Russian Culture.

The course explores the role of the body and sexuality in 20th-century Russian literature, art, and everyday life, covering the sexual revolution of the 1920s, the mass spectacles of the Stalinist period, and the prominent role of sexuality and the body in post-Soviet literature, film, and mass culture. We will focus in particular on the question of how artistic representations of, and reflections on, the body and sexuality, affected social and political revolutions throughout contemporary Russian history.

Spr RUSS1660 S01 25053 TTh 1:00-2:20(10) (F. Fenghi)

RUSS 1810. Tolstoy.

Close readings of Tolstoy’s major novels (War and Peace and Anna Karenina, in particular) and shorter narratives with special emphasis on his iconoclastic ideas about art, religion, and society. Considers Tolstoy’s formal innovation in a broader historical and cultural context. Lectures and discussion. No knowledge of Russian required.

Spr RUSS1810 S01 24273 TTh 2:30-3:50(11) (S. Evdokimova)

RUSS 1860. Chekhov.

Commemorating the hundredth anniversary of the death of the great Russian playwright and short-story writer, this course will examine Chekhov’s innovations in the genre of the short story and in modern theater, as well as his ongoing influences in world literature. Themes include the nature of the Chekhovian comic, subversion of the dominant literary and cultural paradigms and myths, representations of gender and sexuality. In English.

Fall RUSS1860 S01 15137 M 3:00-5:30(15) (S. Evdokimova)

RUSS 1880. Apocalypse Now: Russian Postmodernism and Cold War Narratives.

The course explores dystopian imagination, post-apocalyptic narratives, and the idea of the end of history in Russian postmodern fiction. It will include discussion of some of the major Western theories on postmodernity, as well as comparisons with major American postmodern novels in connection with Cold War culture and sensibility. By looking at artistic and philosophical deconstructions of socialism and capitalism, the two main political regimes of the 20th century, we will study postmodernism as an art and literary current and as a cultural paradigm, pervading every aspect of contemporary culture and everyday life.

Fall RUSS1880 S01 16337 TTh 2:30-3:50(03) (F. Fenghi)


Independent research project on topics related to Russian culture. Enrollment permitted only after the written proposal (instructions in the department office) is submitted to the Concentration Advisor and Chair of the department (deadline: the last day of Add a course without fee period during the semester when the project is undertaken). Please check Banner for the correct section number and CRN to use when registering for this course. Each section limited to 10 students; instructor permission required.

RUSS 1967. Russian Postmodernism.

This course will focus on Russian postmodern literature from the 1960s to the present. We will explore the extent to which its themes and experimental stylistic techniques ummask the sense of fragmentation, disorientation and instability that characterize late 20th-century and contemporary Russia. The fictions studied (including film) offer parodies of philosophical and ideological discourses, reveal an obsession with bodily functions, sexuality, and violence; and playfully reinterpret the grand "metanarratives" of Russian culture. We will relate these trends in Russian fiction to broader discourses of the postmodern in the West. Authors include: Bitov, Erofeev, Limonov, Sorokin, Pelevin, Kabakov, Petrushchevskaya, Tolstaya. DPLL WRIT

Fall RUSS1967 S01 15301 TTh 2:30-3:50(03) (F. Fenghi)


The most important literary currents from the Baroque to early romanticism. Study of style and genre of the development of the literary language.

Fall RUSS2010 S01 15155 W 3:00-5:30(17) (A. Levitsky)

RUSS 2810. Russian Poetry: Silver Age.

Exploration of the writings of such Russian poets as Blok, Tsvetaeva, Pasternak, Mandelstam – in the context of social and cultural changes that shook Russia in first decades of the twentieth century. The class will be conducted in English, but the poetry will be read in the original. Primary goal of the class is to teach students to analyze and discuss the complexities of poetic expression. The class is geared toward graduate students in Slavic but it is open to qualified upper level undergraduates, i.e. to those who can read poetry assignments in original. Instructor permission required.

Fall RUSS2810 S01 15161 TTh 1:00-2:20(10) (V. Golstein)

RUSS 2970. Preliminary Examination Preparation.

For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.

Fall RUSS2970 S01 15030 Arranged 'To Be Arranged'
Spr RUSS2970 S01 24047 Arranged 'To Be Arranged'

RUSS 2980. Advanced Reading and Research.

Only for graduate students. Independent research project on topics related to Russian culture. Enrollment permitted only after the written proposal (instructions in the department office) is submitted to the DGS and Chair of the department (deadline: the last day of Add a course without fee period during the semester when the project is undertaken). Please check Banner for the correct section number and CRN to use when registering for this course. Each section limited to 10 students; instructor permission required.

RUSS 2990. Thesis Preparation.

For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.

Fall RUSS2990 S01 15031 Arranged 'To Be Arranged'
Spr RUSS2990 S01 24048 Arranged 'To Be Arranged'

Slavic

SLAV 1300. Sociolinguistics (with Case Studies on the Former USSR and Eastern Europe).

This seminar course examines the relationship between language and society: e.g. gender and language, politeness, terms of address, conversational analysis, dialects and language, language variation and social class, language policies and their consequences, language and national/ethnic identity. Case-study readings cover (but are not limited to) linguistic situations in East Europe, Russia, and the former republics of the USSR. Knowledge of Slavic languages not required. Open to advanced undergraduate and graduate students. Freshmen and sophomores who demonstrate their knowledge of the basic notions in linguistics or their familiarity with the former USSR and East Europe may enroll with the instructor’s written permission. Enrollment limited to 20. DPLL WRIT

Fall SLAV1300 S01 15148 Arranged (M. Fidler)


Independent research project on topics in Slavic Studies. Enrollment permitted only after the written proposal (instructions in the department office) is submitted to the Concentration Advisor and Chair of the department (deadline: the last day of Add a course without fee period during the semester when the project is undertaken). Please check Banner for the correct section number and CRN to use when registering for this course. Each section limited to 10 students; instructor permission required.


Independent research on various topics in Slavic cultures. Reading, discussion, research must be done in the chosen Slavic language (Czech/ Russian). Close work with faculty on project is expected. Prerequisites: minimum RUSS0600/CZCH 0610 (3rd year-level) or placement evaluation by Russian or Czech language coordinator. Enrollment permitted only after the written proposal (instructions in the department office) is submitted to the Concentration Advisor and Chair of the department (deadline: the last day of Add a course without fee period during the semester when the project is undertaken). Each section limited to 10 students; instructor permission required.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Only for Slavic concentrators writing their senior theses. For requirements and schedule, contact the department. Each section limited to 10 senior Slavic Studies concentrators.

SLAV 2450. Exchange Scholar Program.
Fall SLAV2450 S01 15033 Arranged 'To Be Arranged'

SLAV 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall SLAV2970 S01 15034 Arranged 'To Be Arranged'
Spr SLAV2970 S01 24050 Arranged 'To Be Arranged'

SLAV 2980. Advanced Reading and Research.
Only for graduate students. Independent research project on topics in Slavic Studies. Enrollment permitted only after the written proposal (instructions in the department office) is submitted to the DGS and Chair of the department (deadline: the first day of Add a course without fee period during the semester when the project is undertaken). Please check Banner for the correct section number and CRN to use when registering for this course. Each section limited to 10 students; instructor permission required.

SLAV 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall SLAV2990 S01 15035 Arranged 'To Be Arranged'
Spr SLAV2990 S01 24051 Arranged 'To Be Arranged'

SLAV XLIST. Courses of Interest to Concentrators in Slavic Languages.

Sociology

SOC 0010A. Social Problems.
Revolution and Social Movements. Urbanization and Globalization. War and Genocide. These are all examples of social change, and sociology, the discipline for which this course serves as introduction, seeks to understand, and explain, them all and other transformations too. We focus in particular on how technology and power relations help us explain variations in social change, and how culture shapes our recognition and evaluation of those transformations. Although analyzing the USA today is our common ground, our method is both comparative (other societies) and historical (focusing especially on the 20th and 21st centuries).

SOC 0202. Perspectives on Social Interaction: An Introduction to Social Psychology.
An introduction to the discipline of sociology examining the individual in social situations. Explores the social development of the person, the development of interpersonal relationships, and the problems of integrating the individual and social system. For each area, the personal and situational factors that bear upon the issue are investigated. The objective is to deepen understanding of the behavior of people in a social context.

Emphasis on understanding the interrelations among economic, political, and cultural aspects of change in developing countries. The experience of currently developing nations is contrasted to that of nations which industrialized in the 19th century. Compares the different development strategies which have been adopted by currently developing nations and their consequences for social change.

SOC 0170. The Family.
The state of the contemporary family generates debate within and beyond sociology. That debate is considered by examining different definitions of family, changing gender roles within the family, and the family in cross-cultural context. Special issues include new family forms, such as gay and lesbian families and biological and step-parenthood, as well as changing patterns of work and housework.

SOC 0300A. Contrasting Societies.
Offers a cross-cultural examination of major social institutions and characteristics. Addresses questions such as how do families and intergenerational relations differ in various societies? How does the social safety net differ? What is the character of racial and ethnic relations? Integral is a comparison of the United States and other societies.

SOC 0300F. Unequal From Birth: Child Health From a Social Perspective.
Why are the children of immigrants so healthy? How do experiences in families, schools, neighborhoods and the health care system produce unequal health? What are the consequences of health for the economic and social welfare of individuals and populations? We will read, discuss and evaluate social science evidence to understand how social and economic inequalities produce and result from health inequalities among youth. Attention will be given to both industrialized and developing societies, and to potential ways that social policies can equalize children’s health. This course is designed for first-year students and should appeal to a variety of interests, including social justice, medicine, research and law.

SOC 0310. Theory and Practice of Engaged Scholarship (ESP Seminar).
Efforts are underway across university and college campuses -- in the United States and globally -- to increase opportunities for engaged learning and research. What is engaged scholarship and how does it challenge (and/or complement) more traditional concepts of scholarship and disciplinary knowledge? What are the ethical, practical, and other challenges associated with community-engaged scholarship? The course will use case studies, field work, team projects, and guest speakers from diverse disciplines and sectors to investigate these and other questions. Enrollment limited to Engaged Scholars Program participants. Limited to 20 students per section.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
SOC 1020. Methods of Social Research.
This course introduces students to the frameworks and methods of conducting sociological research -- from both a qualitative and quantitative perspective. The aim is that students develop the skills to ask and answer interesting and important questions about sociological phenomenon. The focus is on designing and executing research, from identifying an interesting question and reviewing the relevant literature, to collecting and analyzing data, to drawing reliable inferences and presenting meaningful results. There is a heavy focus on reading and discussing academic research and working in research teams. By the end of the semester students will complete their own research projects.
Spr SOC1020 S01 25010 MW 3:00-4:20(14) (J. Owens)

SOC 1060. Leadership in Organizations.
What is leadership? What makes a great leader? Can leadership be learned? Improved? This course explores various theoretical approaches to leadership using a combination of lectures and case-study analysis. Additionally, it aims at developing your personal leadership skills by using self-exploration and reflection, self-assessment instruments, role-play, and feedback from peers. Enrollment limited to 100. Fall SOC1060 S01 16303 TTh 6:40-8:00PM(05) "To Be Arranged" (D. Hirschman)

SOC 1080. Social Research Methods and Social Science.
This course introduces students to the frameworks and methods of conducting sociological research -- from both a qualitative and quantitative perspective. The aim is that students develop the skills to ask and answer interesting and important questions about sociological phenomenon. The focus is on designing and executing research, from identifying an interesting question and reviewing the relevant literature, to collecting and analyzing data, to drawing reliable inferences and presenting meaningful results. There is a heavy focus on reading and discussing academic research and working in research teams. By the end of the semester students will complete their own research projects.

Introduction to descriptive and inferential statistics: measures of central tendencies and variability, sampling, tests of significance, correlation, and regression. Also includes the use of computers in data analysis. Knowledge of elementary algebra is assumed. Enrollment is limited to 144 students. Fall SOC1100 S01 16288 MWF 9:00-9:50(01) (G. Elliott)
Spr SOC1100 S01 25011 TTh 10:30-11:50(09) (L. Vanwey)

SOC 1115. The Enlightened Entrepreneur: Changemakers, Inspired Protagonists and Unreasonable People.
This course explores the practices of enlightened entrepreneurs, with the intention of moving beyond the limiting social/commercial dichotomy to develop a more useful paradigm for understanding entrepreneurs whose ventures lead to positive developments in society and in the environment. You will be exploring the success stories and cautionary tales of entrepreneurs to develop an understanding of how ventures can have an impact on their fields of engagement as well as their fields of influence. Afterwards you will develop an assessment tool for understanding the spectrum of entrepreneurs whose ventures lead to positive developments in society and in the environment.
Fall SOC1115 S01 16715 MWF 2:00-2:50(07) (L. DiCarlo)

SOC 1117. Focus Groups for Market and Social Research.
This course introduces students to a range of qualitative research methods commonly used in market and social science research. It is designed to provide students with a skill set that will allow them to conduct and design market and social research that gets below the surface of the traditional survey. Focus groups, ethnographic observation and user-centered research are widely used in product design, communications, marketing and entrepreneurship research. Students will learn and practice all of the methods introduced in the course by conducting a semester-long research project, will gain insight into which methods are most appropriate for particular research needs.
Fall SOC1117 S01 16300 MWF 3:00-4:20(17) (L. DiCarlo)

This course brings design thinking into conversation with qualitative research methods, examining the elements of a comprehensive perspective of context. It introduces students to design research methods, ethnographic research methods, and how they work together. Students will learn how to use these methods to identify and engage in "deep hanging out" with the problem, gap or inefficiency in question. They will then move on to patient contextualized opportunity identification for meaningful innovation. By the end of the course, students will have developed a process for effective, through innovation context analysis. Relevant for designers of products, services, organizations, and experience.
Spr SOC1118 S01 25014 MWF 2:00-2:50(07) (L. DiCarlo)

SOC 1120. Market and Social Surveys.
This course covers the theory and practice of survey research. Topics include questionnaire design and formatting; sample design and selection; interviewing techniques; data base design and data entry; and elementary data analysis and report production. Students individually design and conduct a survey on a topic of their choice, and collectively conduct and analyze a sample survey of the Brown student population.
Spr SOC1120 S01 25075 MWF 11:00-11:50(04) (C. Spearin)

SOC 1260. Race, Class, and Ethnicity in the Modern World.
Introduction to data and research methods for private and public sector organizations. Data used in market research include trends in the population of consumers, economic trends, trends within sectors and industries, analyses of product sales and services, and specific studies of products, promotional efforts, and consumer reactions. Emphasizes the use of demographic, GIS, and other available data. Fall SOC1260 S01 16372 MWF 10:00-10:50(14) (C. Spearin)

SOC 1270. Race, Class, and Ethnicity in the Modern World.
Applies sociological analysis to understand present and historical cases of ethnic and race relations and conflicts. Topics addressed are the social construction of race and ethnicity, historical processes of racialization; ethnic conflict and the nation state; and the linkages between race, class, and social mobility. Focuses on racial and ethnic relations in the U.S., but also has a strong international comparative component. Fall SOC1270 S01 16304 MWF 12:00-12:50(12) (J. Itzigsohn)

SOC 1311. Micro-Organizational Theory: Social Behavior in Organizations.
Micro-Organizational Theory focuses on the human dynamics of organizations as natural systems. It examines how individual attitudes, actions, and interactions make a difference for organizational processes and outcomes. This focus is contrasted with more macro-level approaches, which take the organization (instead of the individual) as the primary unit of analysis. For example, studies of organizations from an economic perspective are typically concerned with the performance of the organization relative to its competitors. Studies of organizations from a macro-sociological focus are typically concerned with an organization's routines and structures, contextualized by the broader environment. SOC 1311 takes a more micro and meso perspective that asks questions such as, "why do individuals in organization behave the way they do, how does this affect the organizations of which they are a part and how, in turn, are individuals affected by their organizations?" Fall SOC1311 S01 16299 MWF 1:00-1:50(06) "To Be Arranged"

Macro-Organizational Theory focuses on the organization and its social/ economic environment. This class will explore various definitions of the organization's environment, and the many types of macro-level organizational structures in which sets of organizations interact, function, compete, and cooperate. Important questions to be asked include the following:
- What is an organizational environment and how do organizations "deal" with what is outside of their boundaries?
- How are the boundaries of organizations defined/recognized/function?
- How do environments influence organizational strategy and performance?
- What are the major theories for assessing macro-level organizational phenomena?
- What are the many ways in which organizations relate to other organizations?
Spr SOC1315 S01 25012 TTh 9:00-10:20(01) (D. Hirschman)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).

An introduction to the fundamental principles and methods of geographic information systems (GIS). Topics include (a) handling different types of geographic datasets, (b) geo-analytical and modeling tools in GIS, (c) conceptual and theoretical aspects of GIS application development, and (d) errors and uncertainty analysis of GIS applications. Laboratory assignments and the project work provide hands on experiences in GIS. Enrollment limited to 39 juniors and seniors. WRIT
Fall SOC1340 S01 16302 TTh 10:30-11:50(13) (R. Franklin)


This class will introduce students to classical and contemporary theories pertaining to work, employment, and labor markets. Readings and class discussions will specifically focus on individuals’ careers and employment processes within organizations. The course will examine: (1) the sociology of labor markets, (2) employment and careers in the new economy and (3) job search, networks, and hiring decisions. Students will develop knowledge of these key theories, which will be applied in high-profile organizational settings.
Spr SOC1352 S01 25398 MWF 9:00-9:50(02) (L. DiCarlo)

SOC 1420. Violence and Society.

The course focuses on the personal and structural sources and consequences of violence in the U.S. We investigate three levels of violence: interpersonal; institutional, wherein social institutions do violence to individuals or groups; and structural, examining the structures of society that tolerate or promote violence, both within the society and toward other societies. Next, we examine the culture of violence that permeates our society, including the mass media and violence. WE focus on specific forms of violence in our society, including gang violence, bullying, violence within schools, sex trafficking, war, religious violence, and terrorism. WRIT
Spr SOC1420 S01 25077 TTh 1:00-2:20(10) (G. Elliott)

SOC 1620. Globalization and Social Conflict.

Examines the effect globalization is having on the economies and societies of the developed and developing world. Focuses in particular on how new forms of global production and networking are transforming the traditional role of the nation-state, creating new dynamics of wealth distribution, and generating new sources of social conflict and political contestation, including transnational social movements. WRIT
Fall SOC1620 S01 16305 TTh 2:30-3:50(03) (P. Heller)

SOC 1870A. Investing in Social Change.

Philanthropy -- "giving away money" -- sounds attractive and simple. But the very acts of contributing and receiving resources affect dynamics and relationships among all involved. We explore philanthropic strategies, social change, the sociological dimensions of philanthropy in historic and current practice. Students engage in teams to investigate a particular community concern, design an investment strategy, recommend the investment of grant dollars. Instructor permission required. Course enrollment is by application only. Applications can be found at swearencenter.brown.edu shortly before the start of class. Students who pre-register must still be selected through the application process and attend the first class meeting. Enrollment limited to 18. WRIT
Spr SOC1870A S01 25078 T 4:00-5:30(16) (M. Johnson)

SOC 1870L. The Economic Foundations of Everyday Life.

Critically examines the relationship between markets and individual, inter-personal, and community level social phenomena. Aims to help students develop knowledge and skills to understand markets as social institutions, evaluate them through different theoretical lenses, analyze their impacts on social life. Students also learn the skills of critical analysis and argumentation needed to form thoughtful opinion, take a critical position, make a decision about important economic and social issues. Thus, students gain expertise as informed actors and advocates in the social and economic system. Prerequisite: SOC 1010, equivalent, or permission of the instructor. Enrollment to 20. WRIT
Fall SOC1870L S01 16721 W 3:00-5:30(17) (D. Hirschman)

SOC 1871D. Sophomore Seminar in Sociology of Development.

This seminar provides an introduction to the study of development. It looks at the diversity of understandings of the concept of development as well as its practical importance in the world. Students will read texts that present pressing questions and issues concerning development practices, policies, and theories. Efforts to connect broad theoretical debates to understanding contemporary problems will be encouraged. Enrollment limited to 20 sophomores. WRIT
Spr SOC1871D S01 25080 W 3:00-5:30(14) (A. Schrank)

SOC 1871R. Knowledge Networks and Global Transformation.

How do refined knowledge and the sociocultural institutions that organize and distribute it influence changes in the institutions, inequalities and cultural systems and practices that define particular world regions and global formations? And how do global transformations influence the trajectories of knowledge production themselves? We will examine particular knowledge-identified agents, including universities, research institutes, think tanks, and professional associations, to consider why they approach global transformations in the way that they do. And we will consider how particular kinds of global transformations, from the end of the cold war and the transformation of information/communication technology to the last financial crisis, affect knowledge production itself. By exploring intersections between global complexity and reflexivity in this fashion, we hope to increase our own capacities for seeing the world not only as it is, but how knowledge might be used in making better alternatives for the future. Enrollment limited to 20 juniors and seniors. WRIT
Fall SOC1871R S01 16306 Th 4:00-6:30(04) (M. Kennedy)

SOC 1871V. Update on American Society: Social Trends in the Last Decade.

American society is always changing, and national data sources (especially the American Community Survey and Current Population Survey) provide updated information on social trends every year. This course will review the most significant recent social trends based on these sources, including such topics as income and wealth inequality, racial and ethnic change, immigration, marriage and family patterns, home ownership, and residential segregation. Enrollment limited to 30 juniors, seniors, and graduate students.
Spr SOC1871V S01 25044 MW 8:30-9:50(02) (J. Logan)

SOC 1950. Senior Seminar.

Advanced research seminar for sociology concentrators. Students take each semester in senior year to work on an honors thesis. Participants examine methods for analyzing, writing, and presenting thesis material and apply peer review techniques in assessing each other's work. Culminates in presentation of thesis to the department. Students doing independent study research may also participate with the instructor's permission. Required for "honors" in sociology. WRIT
Fall SOC1950 S01 16307 MWF 11:00-11:50(16) (C. Spearin)


Supervised reading or research. Specific program arranged in terms of the student's individual needs and interests. Required of intensive concentrators; open to others only by written consent of the Chair of the department. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.


Research seminar for students writing an honors thesis. Under the direction of a faculty advisor, students construct and carry out a research project. The written report of the research is submitted to the advisor for honors consideration. A second reader selected by the thesis advisor certifies that the thesis is of honors quality. Please check Banner for the correct section number and CRN to use when registering for this course.


Research seminar for students writing an honors thesis. Under the direction of a faculty advisor, students construct and carry out a research project. The written report of the research is submitted to the advisor for honors consideration. A second reader selected by the thesis advisor certifies that the thesis is of honors quality. Please check Banner for the correct section number and CRN to use when registering for this course.
**SOC 2010. Multivariate Statistical Methods I.**
Introduction to probability, descriptive statistics and statistical inference. Coverage of the linear model, its assumptions and potential biases. Emphasis on hypothesis testing, model selection and interpretation through application with real data.
Fall SOC2010 S01 16308 T 1:00-4:00 (M. White)

**SOC 2020. Multivariate Statistical Methods II.**
This course is a graduate-level introduction to multivariate regression models for categorical and limited dependent variables. Subject matter includes modeling nominal and ordinal outcomes; truncated distributions; and selection processes. The course also reviews strategies for sample design; handling missing data and weighting in multivariate models. The course employs contemporary statistical software. Special emphasis is placed on model selection and interpretation. Prerequisite: SOC 2010
Spr SOC2020 S01 25045 T 9:00-12:00 (D. Lindstrom)

**SOC 2040. Classical Sociological Theory.**
This is a graduate-level course requires students to engage in detailed analysis and critical review of sociological thought of the 19th and early 20th centuries. The class will introduce students to the critical thinking, methodological innovation, and historical imagination of sociological theory by reading the original texts of the forefathers of sociology, including Karl Marx, Max Weber, Emil Durkheim and others.
Fall SOC2040 S01 16309 M 9:00-12:00 (D. Hirschman)

**SOC 2050. Contemporary Sociology.**
This class offers a review of some of the most interesting contemporary social theorists and the most intense debates in current sociological thought. It thematically reviews the works of Jurgen Habermas on the public sphere, Michel Foucault on disciplinary and governmental modes of power, Bruno Latour on modernity and modern science, Pierre Bourdieu on field and habitus and among others. No prerequisites.
Spr SOC2050 S01 25046 Th 9:00-12:00 (P. Heller)

**SOC 2080. Principles of Population.**
An advanced introduction to theoretical and substantive issues in the social scientific study of population. Major areas within sociology are integrated with the study of population, including the comparative–historical analysis of development, family processes, social stratification, ethnicity, ecological studies, and social policy. Primarily for first year Graduate students.
Fall SOC2080 S01 16316 T 9:00-12:00 (S. Short)

**SOC 2210. Qualitative Methods.**
Emphasis on ethnographic field work through participant observation and interviews. Some attention to content analysis and visual sociology. Technical training in developing observational and interview guidelines, data collection, coding, transcript analysis, and computer applications. Strong emphasis on quality writing. Analysis of ethnographic research in book and article format. Attention to recent developments in ethnography, especially reflexivity and autoethnography. Mandatory S/NC.
Spr SOC2210 S01 25047 M 2:00-5:00 (J. Pacewicz)

**SOC 2230. Techniques of Demographic Analysis.**
Procedures and techniques for the collection, evaluation, and analysis of demographic data; measures of population composition, fertility, morality, and migration; construction of life tables, population and projections, population dynamics; responsible use of demographic methodology.
Spr SOC2230 S01 25048 T 1:00-4:00 (M. White)

**SOC 2240. Event History Analysis.**
An introduction to hazard models and their application to event history data in sociology. Topics include survival distributions, standard parametric models, discrete time approaches, partial likelihood models, and the introduction of covariates. Attention is given to practical application and the estimation of these models with software packages, where possible.
Spr SOC2240 S01 25049 W 2:00-5:00 (D. Lindstrom)

**SOC 2360. Fertility.**
An introduction to the study of the social determinants of human fertility. Contemporary and historical populations are considered. Theories and frameworks used to guide fertility research are reviewed. Special topics include: fertility decision-making, gender and fertility, work and fertility, adolescent fertility, and population policies and family planning programs.
Spr SOC2360 S01 25050 W 9:00-12:00 (S. Short)

**SOC 2385. Environmental Sociology.**
As contestation over environmental concerns proliferates, it draws increasing attention from sociologists. But sociological research on environmental issues raises major challenges. Social-environmental relationships raise theoretical and methodological questions: How do we know an “environmental” issue when we see one? How can we effectively examine the relationships between environmental processes and social processes and structures?
Fall SOC2385 S01 16312 W 2:00-5:00 (S. Frickel)

**SOC 2430. Fields and Methods of Social Research.**
Introduction to strategies sociologists use to formulate theories and conduct methodologically sound research. Hypothesis formulation and research design; special emphasis on identifying causal mechanisms, techniques of operationalization, and choice of relevant comparisons.
Fall SOC2430 S01 16378 M 2:00-5:00 (J. Itzigsohn)

**SOC 2450. Exchange Scholar Program.**
Fall SOC2450 S01 15036 Arranged "To Be Arranged"
Spr SOC2450 S01 24052 Arranged "To Be Arranged"

**SOC 2600. Comparative Historical Analysis.**
The seminar focuses on the application of theory and method in historical sociology. It will combine the reading of exemplary works, both classical and current, in comparative-historical sociology, with an exploration of historical methods that involves methodological readings but focuses on students’ use of archives in their own individual research. For graduate students only.
Fall SOC2600 S02 16377 W 9:00-12:00 (A. Schrank)

**SOC 2612. Geographic Information Systems and Spatial Analysis for the Social Sciences.**
This course is intended for graduate students seeking to learn the basics of Geographic Information Systems (GIS) and how to incorporate spatial questions into social science research. The course is primarily a methods course and through required independent project work, students will learn how GIS and spatial analysis are typically employed across the social sciences. By the end students will be proficient in independent use of ArcGIS, most frequently used GIS software package, and will be able to apply the more common tools of spatial analysis. They will also know basics of cartography.
Spr SOC2612 S01 25081 F 9:00-12:00 (R. Franklin)

**SOC 2960C. Urban Sociology.**
This course will review alternative theoretical perspectives on urban and regional development with an emphasis on variants of ecological and political economy approaches. Substantive topics will include metropolitan restructuring in the U.S. and abroad, growth politics and growth control, neighborhood social networks and collective action, and incorporation of immigrants and minority groups in the metropolis.
Fall SOC2960C S01 16313 Th 2:00-5:00 (J. Logan)

**SOC 2960K. Comparative Political Sociology.**
This course explores both classic and contemporary debates in political sociology. The central thematic is the relationship between democracy and power and includes theories of the state, markets, social class and civil society. The debates are explored through historical and comparative lenses, covering both old and new democracies. Some background in political or sociological theory is recommended.
Spr SOC2960K S01 25051 M 9:00-12:00 (M. Kennedy)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
SOC 2961A. Advanced Spatial Data Analysis Techniques in the Social Sciences.
This course provides a survey of advanced spatial data analytical techniques with particular focus on methods relevant to applications in the social sciences. Topics include spatial process models, Bayesian analysis of spatial data, spatial models for discrete dependent variables (spatial counts, spatial probit and tobit, spatial multinomial models), spatial panel data (time series of cross-sections with spatial effects). The course introduces use of specialized software packages included in R and the PySAL library for spatial analysis in Python. SOC 2960G or equivalent is a prerequisite. The course requires a solid background in multivariate statistics, basic spatial statistics and spatial regression analysis.
Fall SOC2961A S01 16315 F 2:00-5:00 "To Be Arranged"

SOC 2970. Preliminary Examination Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.
Fall SOC2970 S01 "To Be Arranged"
Spr SOC2970 S01 24053 Arranged "To Be Arranged"

SOC 2980. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.
Spring SOC2980 S01 16014 Arranged "To Be Arranged"

SOC 2981. Reading and Research.
Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.
SOC 2990. Thesis Preparation.
For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.
Fall SOC2990 S01 15038 Arranged "To Be Arranged"
Spr SOC2990 S01 24054 Arranged "To Be Arranged"

SOC XLIST. Courses of Interest to Students Concentrating in Sociology.

Theatre Arts and Performance Studies

TAPS 0030. Introduction to Acting and Directing.
Explores basic acting/directing concepts from a variety of perspectives including the use of the actor's imagination/impulsivity in the creation of truthful, dramatic performance; the body, as a way of knowing and communicating knowledge; and the voice, as a means of discovering and revealing emotion/thought. There is a mandatory tech requirement and some evening hours are required. Please go to the TAPS website for specifics on admission and the technical requirement (http://brown.edu/go/TAPS0030). Enrollment limited to 18 first year students. Instructor permission required. No permission will be given during pre-registration.
Fall TAPS0030 S01 16010 TTh 9:30-11:50 (C. Crawford)
Fall TAPS0030 S02 16011 TTh 3:00-5:20 (C. Crawford)
Spr TAPS0030 S01 24866 TTh 9:30-11:50 (C. Crawford)
Spr TAPS0030 S02 24868 TTh 3:00-5:20 (C. Crawford)

TAPS 0100. Playwriting I.
A workshop for students who have little or no previous experience in writing plays. Students will be introduced to a variety of technical and imaginative considerations through exercises, readings and discussions. Course is not open to those who have taken Advanced Playwriting (TAPS 1500, formerly LITR 1011C and TSDA 1500). Enrollment is limited to 14 undergraduates per section. A limited number of spaces are reserved for incoming and transfer students. Instructor permission required. S/NC. WRIT
Fall TAPS0100 S01 16015 F 1:00-3:50 "To Be Arranged"
Fall TAPS0100 S02 16016 TTh 1:00-2:20(10) (E. Terry-Morgan)
Spr TAPS0100 S01 24918 T 1:00-3:50 "To Be Arranged"

TAPS 0200. Playwriting II.
Emphasis is placed on dramatic conventions, such as monologues, dialogue, mise-en-scene and time. Writing includes frequent exercises in various theatrical approaches. This course is limited to undergraduate students. Instructor permission required. Prerequisite: TAPS 0100 (formerly LITR 0110C and TSDA 0100). Enrollment is limited to 14 undergraduates per section. Instructor permission required. S/NC. WRIT
Fall TAPS0200 S01 15995 T 1:00-3:50 "To Be Arranged"
Spr TAPS0200 S01 24930 F 1:00-3:50 "To Be Arranged"

TAPS 0220. Persuasive Communication.
Provides an introduction to public speaking, and helps students develop confidence in public speaking through the presentation of persuasive speeches. Primarily for seniors. Limited to 18. Instructor's permission required. No permission will be given during pre-registration; interested students should sign up well in advance on the TAPS 0220 waitlist (application form is at http://brown.edu/go/TAPS0220) and attend the first day of class. Attendance is mandatory. The application/waitlist process does not apply to students registering for the Summer term through the School of Professional Studies.
Fall TAPS0220 S01 16002 MW 9:00-11:50 (B. Tannenbaum)
Fall TAPS0220 S02 16003 MW 1:00-3:50 (B. Tannenbaum)
Fall TAPS0220 S03 16004 MW 9:00-11:50 (B. Tannenbaum)
Fall TAPS0220 S04 16005 MW 1:00-3:50 (B. Tannenbaum)
Fall TAPS0220 S05 16006 MW 9:00-11:50 (B. Tannenbaum)
Spr TAPS0220 S01 24871 MW 9:00-11:50 (B. Tannenbaum)
Spr TAPS0220 S02 24872 MW 1:00-3:50 (B. Tannenbaum)
Spr TAPS0220 S03 24873 MW 9:00-11:50 (B. Tannenbaum)
Spr TAPS0220 S04 24874 MW 1:00-3:50 (B. Tannenbaum)
Spr TAPS0220 S05 24875 MW 9:00-11:50 "To Be Arranged"

TAPS 0230. Acting.
Focus on elements of dramatic analysis and interpretation as applied to the art of acting, and, by extension, directing. Monologues, scene study, and improvisation are basis for comment on individual problems. Reading of dramatic texts and theory. Substantial scene rehearsal commitment necessary. Attendance mandatory. Not open to first-year students. Enrollment limited to 20. Instructor permission required. No permission will be given during pre-registration. S/NC.
Fall TAPS0230 S01 16007 MW 11:00-1:50 (S. d'Angelo)
Fall TAPS0230 S02 16008 Th 1:00-3:50 (S. d'Angelo)
Spr TAPS0230 S01 24915 Th 1:00-3:50 "To Be Arranged"

TAPS 0250. Introduction to Technical Theatre and Production.
This course is an introduction to the basic principles of stagecraft, lighting and sound technology and the different elements of theatrical design. Instructor permission required. Enrollment limited to 15.
Fall TAPS0250 S01 16001 MW 10:00-11:50 (A. Haynes)
Spr TAPS0250 S01 24870 MW 10:00-11:50 (A. Haynes)

TAPS 0260. Stage Lighting.
This course is an introduction to stage lighting. Enrollment limited to 20.
Fall TAPS0260 S01 16014 Th 10:00-12:50 (T. Hett)

TAPS 0310. Beginning Modern Dance.
Introduction to the art of movement. Focuses on building a common vocabulary based on ballet, vernacular forms, improvisation, Laban movement analysis, American modern dance, and the body therapies. Individual work is explored. One and one-half hours of class, four days a week. Enrollment limited to 40. S/NC.
Fall TAPS0310 S01 15992 MTWTh 1:00-2:20 (J. Strandberg)

TAPS 0320. Dance Composition.
Focuses on building the individual's creative voice. A movement vocabulary is developed from Western techniques (ballet, American modern dance, Laban/Bartenieff movement analysis, vernacular forms, space-harmony/movement physics, and the body therapies) along with group improvisations and collaboration with artists in other disciplines. Enrollment limited to 40. S/NC.
Fall TAPS0320 S01 15991 MWF 10:00-11:50 (M. Bach-Couliba)
TAPS 0330. Mande Dance, Music and Culture.
Examines, by theory and practice, the techniques and philosophy of dance in Mande culture. Each dance is taught as a highly codified language, with detailed phrasing structures, focus, center, variations of intonation, and qualitative choice. The specific ethnicities are studied in relationship to their music and dance variations. Participants must be physically fit. Attendance at the first class is required. There is an application process for enrollment. Enrollment limited to 100. S/NC
Spr TAPS0330 S01 24865 MWF 1:00-2:50 (M. Bach-Coulibaly)

TAPS 0930A. The Actor's Instrument: Voice and Speech.
A complete and well-seasoned actor has the ability to perform with specificity and ease, both vocally and physically. Specificity comes from an integration of speech and movement technique. Ease is only possible when a mastery of technical skills reaches the point where the actor can integrate them without loss of spontaneity. The goal of this class is to give the student the fundamental techniques of voice and speech in relation to the body. Prerequisite: TAPS 0230. Enrollment limited to 16. Instructor permission required. S/NC
Prerequisite does not apply to students registering for the Summer term through the Office of Continuing Education.
Spr TAPS0930A S01 24865 MWF 4:00-5:50 (T. Jones)

TAPS 0930C. The Actor's Instrument: Stage Movement for Actors and Directors.
Students will be engaged in a process of exploration that centers on the physical relationship of the actor to the physical reality of the stage including sound, props and costumes. Work with a broad spectrum of contemporary and classic movement theories/approaches to constructing performance. Instructor permission required; interested students must come to the first class, fill out an application and participate in a sample class. Accepted students will be notified by the third class meeting. You must show up to every class meeting in order to keep your application active throughout the registration process. Enrollment limited to 18.
Spr TAPS0930C S01 24860 MWF 1:00-3:50 (S. d'Angelo)

TAPS 1000. Intermediate Dance.
Designed to expand the student's knowledge of and proficiency in dance as an art form. Mainly a studio course, but selected readings, papers, critiques, and field trips are important components of the course. Prerequisite: TAPS 0310 or equivalent. Enrollment limited to 40. S/NC
Spr TAPS1000 S01 24853 MWF 10:00-11:50 (S. Skybetter)

TAPS 1100. Stage Management.
To introduce students to the principles and techniques of modern stage management from script selection to closing. Through the study of various models of stage management (both professional and academic), students will develop an appreciation of the role of the stage manager as the facilitator, mediator and organizer of the production process. Students will apply theory learned in the classroom by stage-managing or assisting stage-managing a TAPS production and/or observing other TAPS and Trinity Rep stage managers during the production process. Enrollment limited to 12.
Fall TAPS1100 S01 15996 M 1:00-3:50 (B. Reo)

TAPS 1160. Style and Performance.
For qualified sophomores, juniors, and seniors who offer TAPS 0230 as a prerequisite. Period scene study and monologues are basis for comment on individual progress in acting/directing. Extensive reading of dramatic texts and historic research materials. Work in voice, movement, and poetic text. Substantial commitment necessary for preparation of class scenes. Attendance mandatory. Prerequisite: TAPS 0230. Limited to 20. Instructor's permission required. No permissions will be given during pre-registration.
Fall TAPS1160 S01 16013 TTh 1:00-3:50 "To Be Arranged"

TAPS 1210. Solo Performance.
An exploration of the challenges and rewards of performing solo. Students research, write, and perform a one-person show. Other projects may include performance art, stand-up comedy, and monologuing. Substantial time commitment. Attendance mandatory. For advanced students with appropriate background and experience. Submit proposal and resume in the fall, For guidelines and information contact taps@brown.edu. Permission required in advance. Enrollment limited to 20.
Spr TAPS1210 S01 24921 TTh 1:00-3:50 (S. d'Angelo)

This course explores performance practices that predate the European Renaissance across disparate parts of the globe. Considered will be Paleolithic rock art and other evidence of ritual practices in Europe, Africa, and the Americas; ritual dramas of Egypt, Greece, and the Roman Empire; Sub-Saharan African traditions and theatre/dance forms in ancient India, medieval Japan and the indigenous Americas. In short, we will explore a wealth of differing ancestral theatrical modes and methods that continue to leave their mark in contemporary diasporic expressions. WRIT
Fall TAPS1230 S01 16012 TTh 10:30-11:50 (R. Schneider)

TAPS 1240. Performance Historiography and Theatre History.
This course will provide an introduction to performance history and historiography by concentrating on analysis of dramatic texts, theatrical events, festival performances and “performative” state and religious ceremonies from 1500–1850. We will explore incidents in Asia, the Americas and Europe as related to state consolidation, colonization, incipient nationalism(s), urbanization, cultural negotiation, and the representational practices the enacted. Enrollment limited to 35. WRIT
Spr TAPS1240 S01 24919 TTh 10:30-11:50 (P. Ybarra)

TAPS 1250. Twentieth-Century Western Theatre and Performance.
The study of key figures and movements in 20th-century Western theatre and performance, from approximately 1870 to 2000. We explore naturalism and alternative strategies to realism such as symbolism, futurism, surrealism and constructivism, along with myriad figures in the modern and postmodern "avant-garde." WRIT
Spr TAPS1250 S01 24920 TTh 9:00-2:20 (R. Schneider)

TAPS 1280C. Stage Lighting II.
This course focuses on the implementation of lighting techniques learned in the introductory course. Emphasizes work in a studio environment with other theatre designers, implementing CAD and vector works techniques as well as scale models. Course culminates in a full lighting design for a production. Prerequisite: TAPS 0260.
Spr TAPS1280C S01 24922 TTh 10:00-11:50

TAPS 1280F. Introduction to Set Design.
Students will explore set/scenic design for live performance in a studio format. The main objective is to introduce the language, tools, and technical skills involved in the discipline of scenic design and to lay the foundation for further study while empowering students to actively engage as set designers in productions on campus after taking the course. A special feature of the course are guest visits which will give students the opportunity to engage in dialogue with a professional director and playwright in order to situate set design as a conceptual artistic discipline which utilizes technical tools. Enrollment limited to 10.
Fall TAPS1280F S01 15997 M 1:00-4:50 "To Be Arranged"

TAPS 1280Y. Issues in Performance Studies.
Explores myriad ways of thinking, doing and talking about performance in the broad spectrum – from social media to theatre, dance, film, and everyday life including identifications and disidentifications of gender, race, sex, and class. We may study museum installations, surgery, tourism, carnival, history reenactments, performance-based art, sports, and even dinner parties among other actions and sites. The objective is not to pin down a genre or category of performance but to understand performance variously as an analytic and practice, a form of lived history and way of being, including but not limited to traditional theater and dance practices.
Fall TAPS1280Y S01 16320 W 3:00-6:30 (R. Schneider)
TAPS 1281M. Introduction to Costume Construction.
An introduction to the study and practice of core costume construction skills. Topics include basic machine, hand sewing and patterning techniques.
Fall TAPS1281M S01 16019 W 3:00-6:50 (R. Cesario)

TAPS 1281W. Artists and Scientists as Partners.
This course focuses on current research on and practices in arts and healing, with an emphasis on dance and music for persons with Parkinson's Disease (PD) and Autism (ASD). Includes guest lecturers, readings, field trips, and site placements. Admission to class will be through application in order to balance the course between self-identified artists and scientists and those primarily interested in PD and those primarily interested in ASD. Enrollment limited to 30.
Fall TAPS1281W S01 16017 TTh 2:30-3:50(03) (J. Strandberg)

TAPS 1281Z. Artists and Scientists as Partners: Theory to Practice.
This course focuses on the application of current research in neuroscience, education, narrative medicine, and best practices in the arts for persons with neurological disorders. Through site placements, students will provide arts experiences (primarily dance and music) for persons with Parkinson’s Disease (PD) and Autism Spectrum Disorders (ASD). Course also includes guest lecturers, readings, field trips, curriculum development, ethnographic research, and planning of and participation in a convening of artists and scientists engaged in holistic healing.
Spr TAPS1281Z S01 24923 TTh 2:30-3:50(11) (J. Strandberg)

TAPS 1300. Advanced Set Design.
The examination of the working relationship between designer and director. An emphasis on the design abilities needed to communicate varied visual approaches. Developing the creative, theatrical vocabulary needed to turn a director's vision into a fully articulated set design. A substantial amount of plays will be read and researched. Drafting and model rendering techniques will be applied. Prerequisite: TAPS 1280F. Instructor approval required prior to registration. Enrollment limited to 10.
Spr TAPS1300 S01 24926 W 1:00-4:50 'To Be Arranged'

TAPS 1310. Advanced Modern Dance.
This course is designed for students with several years of dance experience in any genre. The purpose of this class is to endow students with technical mastery of current contemporary movement vocabularies, with emphasis on Release Technique and Bartenieff Fundamentals. Enrollment limited to 40. S/NC.
Fall TAPS1310 S01 15993 MWF 3:00-4:50 'To Be Arranged'

TAPS 1330. Dance History: The 20th Century.
An exploration of the major figures and trends in modern dance. While the main focus of the course is on American Dance, attention is given to earlier European and other dance traditions that have contributed to the American dance heritage. May be of particular interest to Americanists, art historians, dancers, and theatre majors.
Fall TAPS1330 S01 16009 TTh 10:30-11:50(13) (J. Strandberg)

TAPS 1340. Dance Styles.
This course focuses on the diverse styles, techniques and movement theories of Modern Dance. The students will practice the techniques and styles and will also study biographical material, view films, and attend live performances when possible. Enrollment limited to 40. S/NC.
Fall TAPS1340 S01 24859 MWF 3:00-4:50 (J. Strandberg)

TAPS 1350. Dance Performance and Repertory.
Half course credit each semester. A study of dance repertory through commissioned new works, reconstruction, coaching, rehearsal, and performance. Guest artists and consultants from the American Dance Legacy Institute. Enrollment is by audition. Limited to skilled dancers. Instructor permission required. S/NC.
Fall TAPS1350 S01 15994 Th 8:00PM-10:50PM (J. Strandberg)
Fall TAPS1350 S01 15994 MW 6:00-9:50PM (J. Strandberg)

TAPS 1360. Dance Performance and Repertory.
A study of dance repertory offered through commissioned new works, reconstruction, coaching, rehearsal, and performance. The course will explore the phenomenology of dance, audience-performer connection, theatre production and dance criticism, among other topics. Enrollment is by audition. Limited to skilled dancers. S/NC.
Spr TAPS1360 S01 24925 Th 8:00PM-10:50PM (J. Strandberg)
Spr TAPS1360 S01 24925 MW 6:30-9:50PM (J. Strandberg)

TAPS 1370. New Works/World Traditions.
From research to performance, develops new dance theater pieces that are rooted in Mande dance and American dance. Includes study with Mande, American, and European artists in building a body of repertory for the concert stage. May be repeated for credit. By audition. S/NC.
Spr TAPS1370 S01 24861 Su 3:00-6:50 (M. Bach-Coulibaly)
Spr TAPS1370 S01 24861 Th 6:00-7:50 (M. Bach-Coulibaly)
Spr TAPS1370 S01 24861 T 6:00-9:50PM (M. Bach-Coulibaly)

TAPS 1380. Mise en Scene.
A reconstruction of the idea of a stage and a frame on the evidence of theory, novels, plays, and especially films-the seen and the unseen-using the organizing strategies of mystery. Art's "impossible" brokering of the real and the representational in a dialectic of space is considered from a multiplicity of perspectives in diverse works. Enrollment limited to 20. Instructor permission required. WRIT
Spr TAPS1380 S01 24916 M 3:00-5:30(13) (S. Golub)

TAPS 1430. Russian Theatre and Drama.
An overview of Russian theatre and drama from the 18th century to the late 20th century. Emphasis on plays as texts and historical documents, and on theatrical conditions, productions, and innovations. All readings are in English. Russian area studies concentrators are encouraged to enroll. Instructor permission required. WRIT
Spr TAPS1430 S01 24864 MWF 11:00-11:50(04) (S. Golub)

TAPS 1520. Seminar in Theatre Arts.
Seminar designed for senior theatre arts concentrators, required during Semester VII. Topics focus on career planning and theatre arts subjects not dealt with in other courses. Enrollment limited to seniors. Fall TAPS1520 S01 16021 F 1:00-3:30 'To Be Arranged'

TAPS 1970. Independent Reading and Research.
Intensive reading and research on selected topics arranged in terms of special needs and interests of the student. A written proposal must be submitted to the instructor and the chair of the theatre arts department before the project can be approved. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

To be taken by all students accepted into the theatre arts honors program. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

In the second year of the three-year MFA Playwriting Program, students are required to teach undergraduates Introductory and Intermediate Playwriting. This course readies MFAs for their teaching in advance of their time at the head of the classroom, provides them with mentorship during the conduct of their teaching, and assesses their experience at the end of their assignments. It is an intensive seminar, where the head of the Playwriting Program meets with students individually and as a team, sharing in the evolutions of curricular design and practice, offering close comment and tailored assignments (suggested readings; writing tasks).
Fall TAPS2300 S01 16151 Arranged (E. Ehn)
Spr TAPS2300 S01 24929 Arranged (E. Ehn)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
TAPS 2310. Graduate Playwriting.
With Word as the bodying forth into social reality of original experience, the structures, purposes and ethical risks of writing for performance are examined; experienced through the reading of each other's works-in-progress, through the reading of essays and in session exercises. Must be taken by playwriting grad students every semester in residence. May be taken multiple times for credit. Undergraduates will be admitted with permission of the instructor. Contact Erik_Ehn@Brown.edu using "Grad PW" in the subject line. Permission will be given once manuscripts have been reviewed. S/N/C
Fall TAPS2310 S01 16020 Th 11:00-3:50 (E. Ehn)
Spr TAPS2310 S01 24928 Th 11:00-3:50 (E. Ehn)

TAPS 2450. Exchange Scholar Program.
Fall TAPS2450 S01 15039 Arranged "To Be Arranged"

This course is open only to students of the Consortium. It will include fundamental exercises, textual analysis, rehearsal techniques, character and scene work designed to provide the student actor with a working method based upon the general principles of the Stanislavskian system. A major part of this course will include rehearsal and performance responsibilities.
Fall TAPS2500 S01 11138 Arranged (B. McEleney)

This course is open only to students of the Consortium. It will provide a progression of exercises to free, develop and strengthen the voice as the actor's instrument. The classes focus on relaxation, physical awareness, breath, freeing the channel for sound developing the resonators, releasing the voice from the body, articulation, self-expression, and the link to text and acting.
Fall TAPS2510 S01 11139 Arranged (T. Jones)

TAPS 2520. Movement: Form, Center and Balance.
This course is open only to students of the Brown University/Trinity Rep MFA Consortium program. It will develop a physical vocabulary through floor work, choreographed combinations and movement improvisation, helping the actor develop an understanding of space, strength of movement, and physical life onstage.
Fall TAPS2520 S01 11140 Arranged (S. Berenson)

TAPS 2530. Directing: Composition and Staging.
This course is open only to the MFA Consortium program. It will include information and exercises addressing how to stage a play, balance the space, and transition from scene to scene. It will also focus on the director's responsibility to the actors, and ways in which to help them create their roles.
Fall TAPS2530 S01 11141 Arranged (B. Mertes)

TAPS 2550. Acting: Realism and Modernism.
This is a two-credit course and is open only to students of the MFA Consortium program. This is a scene study class with an emphasis on the problems of style and language in the plays of Moliere and Shakespeare.
Fall TAPS2550 S01 20158 Th 10:00-12:50 (E. Ehn)

TAPS 2560. Voice: Phonetics.
This course is open only to students of the Brown University/Trinity Rep MFA Consortium program. The course will teach articulation, self expression, and link to text and acting. Additional work is devoted to speech and diction, with an introduction to the International Phonetic Alphabet (IPA) and a progression through Standard American Speech to rudimentary dialect work.
Spr TAPS2560 S01 20159 Arranged (T. Jones)

TAPS 2570. Movement: Physical Life and Language.
This course is open only to students of the Brown University/Trinity Rep MFA Consortium program. It will help the student incorporate text and physically in order to create the inner and outer life of a character. Special attention will be given to the student's repetitive physical patterns, and new ways will be explored in examining the internal and external life of a character.
Spr TAPS2570 S01 20160 Arranged "To Be Arranged"

TAPS 2580. Directing: Collaboration with the Playwright.
This course is open only to students of the MFA Consortium program. It will focus on issues of collaboration between the playwright and the director. Each director will be assigned to work on a new script in cooperation with a playwright. A workshop production will be staged and open to the public.
Spr TAPS2580 S01 20161 Arranged (B. Mertes)

TAPS 2600. Acting: Shakespeare and Moliere.
This is a two-credit course and is open only to students of the MFA Consortium program. This is a scene study class with an emphasis on the problems of style and language in the plays of Moliere and Shakespeare.
Fall TAPS2600 S01 11142 Arranged (B. McEleney)

TAPS 2610. Voice: Verse Text.
This course is open only to students of the MFA Consortium program. It will include advanced vocal work and an introduction to singing in performance. Rhythm and rhyme will be explored in relation to lyrics and verse.
Fall TAPS2610 S01 11143 Arranged (T. Jones)

This course is open only to students of the MFA Consortium program. This class will provide a step-by-step understanding and application of The Alexander Technique, which helps to develop body alignment, range of motion, and inner stillness.
Fall TAPS2620 S01 11144 Arranged (S. Berenson)

TAPS 2630. Directing: The Director's Vision.
This course is open only to students of the MFA Consortium program. Under close supervision, students will direct projects at the Consortium. Each student will be responsible for the creation of either a new or an established script. Students will meet regularly with the faculty to discuss process and progress.
Fall TAPS2630 S01 11145 Arranged (B. Mertes)

TAPS 2650. Acting: Problems of Style.
This is a two-credit course and is open only to students of the MFA Consortium program. This is a scene study class with an emphasis on the problems of style and language in non-realistic plays. In addition to advanced work on Shakespeare's texts, the course will explore other playwrights, possibly including Ibsen, Strindberg, Shaw and Beckett.
Spr TAPS2650 S01 20162 Arranged (B. McEleney)

This course is open only to students of the MFA Consortium program. Students will work on music, both as soloists and in small groups. The course will address issues of sight reading, breath support, phrasing, and how to stage a song for performance.
Spr TAPS2660 S01 20163 Arranged (T. Jones)

TAPS 2670. Movement: Stage Combat, Clowning, and Other Physical Form.
This course is open only to students of the MFA Consortium program. It will offer basic instruction in many physical areas including, but not limited to stage combat, juggling, mime, tumbling and clowning.
Spr TAPS2670 S01 20164 Arranged "To Be Arranged"

This course is open only to students of the MFA Consortium program. It will include issues of directing, as well as the concerns of an Artistic Director and Associate Artistic Director. Each student will be expected to assist director in professional production at Trinity Rep Company.
Spr TAPS2680 S01 20165 Arranged (B. Mertes)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
TAPS 2700. Acting: Monologue Performance.  This is a two-credit course and is open only to students of the Brown University/Trinity Rep MFA Consortium program. Acting assignments will include solo work presented in a variety of ways. These might include a selection of monologues and songs presented by the students to show the full range of his or her abilities. A performance might also include a solo piece written by the student and presented as a single-actor production.  
Fall TAPS2700 S01 11146 Arranged (B. McElaney)

TAPS 2710. Voice: Dialects and Accents.  This course is open only to students of the Brown University/Trinity Rep MFA Consortium program. This course will teach actors various American regional dialects and international accents including British, Irish, Italian and Russian. Students will examine the language with the use of the International Phonetic Alphabet, and will be expected to perform using the regionalisms and dialect and then teach it to the rest of the class.  
Fall TAPS2710 S01 11147 Arranged (T. Jones)

TAPS 2720. Physical Theatre.  This course is open only to students of the Brown University/Trinity Rep MFA Consortium program. This course will explore various kinds of physical theatre, and ways in which the actor can be free, spontaneous and open in rehearsal and performance. Areas of exploration will include Commedia, mask and yoga.  
Fall TAPS2720 S01 11148 Arranged (S. Berenson)

TAPS 2730. Directing: Design in the Collaborative Process.  This is a two-credit course and is open only to students of the Brown/Trinity Rep MFA Consortium program. Directing students will study theatrical design including stage settings, costumes, lights and sound. Particular focus will be given to ways in which a director works with a designer to establish his or her vision of the play. Areas of study will include blueprints, floor plans, renderings and focus.  
Fall TAPS2730 S01 11149 Arranged (B. Mertes)

TAPS 2750. Acting and Directing: Practical Application.  This is a two-credit course and is open only to students of the Brown University/Trinity Rep MFA Consortium program. The course will prepare acting students for a graduate showcase which will be performed in New York City and Los Angeles for agents, casting directors, and other professionals in the industry. Directing students will stage a New York showcase of their work for agents, artistic directors, and other theatre professionals. The course will also cover audition and interview techniques. Video work will be explored in detail, examining the difference between stage and on-camera direction and performance.  
Spr TAPS2750 S01 20166 Arranged (B. McElaney)

TAPS 2760. Professional Performance.  This is a two-credit course and is open only to students of the Brown University/Trinity Rep MFA Consortium program. It will include performance work in a variety of venues including, but not limited to, Trinity Rep’s mainstage. Work might include major and/or minor roles at Trinity, as well as understudy responsibilities for the professional company. Based on their participation in this course, students will be awarded their union cards so that they are able to enter the professional area upon graduating.  
Spr TAPS2760 S01 20167 Arranged (S. Berenson)

TAPS 2770. Directing: Practical Application.  This is a two-credit course and is open only to students of the Brown University/Trinity Rep MFA Consortium program. Each student will direct a professional full-scale production in one of Trinity Rep’s theatres. In addition to directorial duties, students will assist in casting and designing the play, and will be fully involved in areas of budget, publicity, press relations, marketing and development.  
Spr TAPS2770 S01 20168 Arranged (B. Mertes)

TAPS 2970. Comprehensive Examination Preparation.  For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing for a preliminary examination.  
Fall TAPS2970 S01 15040 Arranged ‘To Be Arranged’
Spr TAPS2970 S01 24055 Arranged ‘To Be Arranged’

TAPS 2975. Thesis Workshop.  For graduate playwrights, in their second and third years, rehearsing and revising their thesis projects. May be taken multiple times for credit. Must be taken both semesters in the third year.  

TAPS 2980. Graduate Level Independent Reading and Research.  A program of intensive reading and research on selected topics arranged in terms of special needs and interests of the student. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.  

TAPS 2981. Master’s Thesis Research.  Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.  

TAPS 2990. Thesis Preparation.  For graduate students who have met the tuition requirement and are paying the registration fee to continue active enrollment while preparing a thesis.  
Fall TAPS2990 S01 15041 Arranged ‘To Be Arranged’  
Spr TAPS2990 S01 24056 Arranged ‘To Be Arranged’

University Courses

UNIV 1520. The Shaping of World Views.  To many students, an exclusive emphasis on specialized studies fragments the “world” in which they live. A widespread feeling of loss pervades the minds of students who often come to universities to learn right from wrong, to distinguish what is true from what is false, but who realize at the end of four years that they have deconstructed their freshman beliefs, values, and ideologies, but have created nothing to replace them. This course examines the diversity of worldviews both synchronically and diachronically and surveys various explanations for such diversity. Enrollment limited to 30. Conducted in English. WRIT  
Spr UNIV1520 S01 24654 MWF 2:00-2:50(07) (O. Almeida)

UNIV 1700. Transformation of the Research University.  This seminar will focus on recent transformations of the academic, instructional and administrative character of the elite American research universities. Emphasis will be on selected pressure points (such as research funding, diversity, technology, market influence) that drive change and shape the future.  
Spr UNIV1700 S01 25397 W 3:00-5:30(14) (W. Simmons)

Urban Studies

URBN 0210. The City: An Introduction to Urban Studies.  This introductory course to Urban Studies is taught in an entirely new format. Led by Prof. Neumann, it will include lectures by Urban Studies faculty who will present their views of the field. It offers an interdisciplinary approach to the history, physical design, spatial form, economy, government, cultures, and social life of cities worldwide. Which are the most urgent issues facing cities today? How will continued urban growth affect the environment? How can we learn from historic approaches to urban planning? Which are the most promising solutions to relieve urban inequality? What can be learned from ‘informal housing’ developments?  
DPLL WRIT  
Fall URBN0210 S01 15162 TTh 1:00-2:20(10) (D. Neumann)

URBN 0230. Urban Life in Providence: An Introduction.  An introduction to Urban Studies and to the city of Providence, this first year seminar explores from an interdisciplinary perspective how cities are broadly conceptualized and studied. Students then focus on urban dwelling, using Providence as a first-hand case study. We comprehensively examine urban life and change, attending to urban history, the diverse configurations of people and place, social and environmental issues, and urban sustainability. In a lively and varied approach to local learning, course activities include lectures, discussion, reading and writing assignments, films and other media, guest speakers, and excursions to local sites. Enrollment limited to 20 first year students.  
FYS  
Fall URBN0230 S01 15108 TTh 10:30-11:50(13) (R. Carter)
### URBN 1200. The United States Metropolis, 1945-2000.
This lecture and discussion course will provide students with an introduction to the history, politics, and culture of United States cities and suburbs from the end of World War II to the close of the twentieth century. Readings are drawn from recent work in the political, social, and cultural history of U.S. cities as well as primary sources rooted in the period under study. DPLL WRIT

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### URBN 1220. Planning Sustainable Cities.
What does sustainability mean in the context of urban areas? Can sustainability be achieved in cities? If so, in what contexts and how? In this course, we will explore theoretical elements of sustainable development and their applications to urban planning. We will also explore various practices in important subfields of planning — land use, transportation, brownfields redevelopment, affordable housing, renewable energy, food systems, economic development, and governance. This is a project-based course and includes lectures, discussions, workshops, case studies, selected guest speakers, a final project and a mandatory field trip. The approach is interdisciplinary and open to non-concentrators.

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### URBN 1500. Understanding the City through Data.
Cities are complex systems, but luckily there are lots of data and analysis techniques to make sense of them. In this project-based course, you will learn to conduct a variety of data analysis techniques that are commonly used and essential in urban studies. The course will be selected from humanities, social sciences, and real-life urban problems.

| Spr  | URBN1500 S01 | 24122 | TTh | 10:30-11:50(09) | (Y. Sungu-Eryilmaz) |

### URBN 1870D. Downtown Development.
This seminar examines the development and revitalization of the urban core in the United States with a focus on urban planning. Providence is used as a laboratory to explore development from the perspective of the planner, the developer, and city residents. Important concepts are illustrated through field trips, public meetings, and guest speakers. WRIT

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### URBN 1870J. The Politics of Community Organizing.
Introduces key issues concerning community organizing. Focuses on the life, skills, and tactics of Saul Alinsky and the national organization he founded, the Industrial Areas Foundation (IAF). Analyzes the work of the IAF in a number of urban settings. Seeks to develop theoretical models for studying community mobilization in urban America. Priority given to Political Science and Urban Studies concentrators. DPLL WRIT

| Spr  | URBN1870JS01 | 24274 | M  | 3:00-5:30(13) | (M. Orr) |

### URBN 1870M. Urban Regimes in the American Republic.
A probing of topical issues in both their theoretical antecedents and their contemporary manifestations. Examines the intellectual debates and the scholarly treatments surrounding issues of power in the city, urban redevelopment policy, urban poverty, urban educational policy, and race in the city. Enrollment limited to 20. WRIT DPLL

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<td>15318</td>
<td>M</td>
<td>3:00-5:30(15)</td>
<td>(M. Orr)</td>
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### URBN 1870N. The Cultural and Social Life of the Built Environment.
This seminar investigates the relationship between people and place. It considers the ways that people create and experience the human-made landscape, how they understand place through various aesthetic forms, and political conflict over space and place. We look mostly at the history and contemporary development of cities and suburbs in the United States. Students will prepare a final project on a specific aspect of the built environment; they will be encouraged to focus their research on Providence or another local community. Enrollment limited to 20. Priority given to Urban Studies concentrators and seniors; instructor permission required otherwise. WRIT

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<td>W</td>
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### URBN 1870S. The City, the River, and the Sea: Social and Environmental Change at the Water’s Edge.
This course examines urban social and environmental change at the water’s edge, focusing in particular on urban rivers, coastal areas, and deltas. Beginning with key frameworks for understanding the relationship between people and place, students explore the history and current concerns of urbanization, within the larger and increasingly urgent inquiry on human dwelling and water/waterways. The course is then organized around key topics and case studies from around the world, framed by historical and scientific data but also explored through ethnography, narrative non-fiction, and documentary work to understand how water, urban dwelling, and change are variously experienced, enacted, and presented. WRIT

| Spr  | URBN1870S S01 | 24275 | Th | 1:00-2:00(10) | (R. Carter) |

### URBN 1870T. Transportation: An Urban Planning Perspective.
This seminar explores how urban planners in the U.S. plan for and around various transportation networks. We will examine how these networks are designed and funded, which modes get priority over others, and ultimately how transportation shapes the built environment. Realworld examples of plans and projects from Providence and Rhode Island are used throughout the course. Important concepts are illustrated through field trips and guest speakers. WRIT

| Spr  | URBN1870TS01 | 24124 | Th | 4:00-6:30(17) | (R. Azar) |

### URBN 1970. Independent Reading and Research.
A specific program of intensive reading and research arranged in terms of the special needs and interests of the student. Open primarily to concentrators, but others may be admitted by written permission. Section numbers vary by instructor. Please check Banner for the correct section number and CRN to use when registering for this course.

A program of intensive reading, research, and writing under the direction of a faculty member. Permission should be obtained from the Thesis Advisor in Urban Studies. Mandatory attendance at periodic meetings during the semester is required. Open to Senior Urban Studies concentrators pursuing Honors in Urban Studies. Instructor permission required.

A program of intensive reading, research, and writing under the direction of a faculty member. Permission should be obtained from the Thesis Advisor in Urban Studies. Mandatory attendance at periodic meetings during the semester is required. Open to Senior Urban Studies concentrators pursuing Honors in Urban Studies. Instructor permission required.

### URBN XLIST. Courses of Interest to Concentrators in Urban Studies.
#### Visual Art

**VISA 0100. Studio Foundation.**
An introduction to basic visual art concepts, exploring a range of materials with emphasis on experimentation and analysis of visual relationships. Drawing is a vital part of this course. VISA 0100 is a prerequisite to any advanced studio course work at Brown or the Rhode Island School of Design.

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</table>
Course Descriptions

VISA 0120. Foundation Media: Sound and Image. This foundation studio course focuses on the production and theory of screen-based digital media artwork and introduces the computer as a medium and a tool for art. The principles and techniques of web design, and sound and image production are addressed in readings, screenings, and a number of specific projects. During pre-registration, the course is open to Visual Arts concentrators; all others may enroll with instructor permission. After pre-registration ends, registration for all students is by instructor permission only. Enrollment limited to 12.

VISA 0130. 3-D Foundation. This is an extensive study in form and structure. It is designed to develop spatial understanding and the fundamentals of 3-dimensional design and construction. Students will explore the structural, compositional and conceptual implications of common materials, such as wood, metal, plaster and found objects. Projects are designed as a means for investigating a variety of sculptural processes. Students will learn safe usage of power and hand tools, casting techniques, wood and metal work. In addition, special emphasis will be placed on creativity, critical thinking and the ability to successfully articulate ideas visually.

VISA 0140. Photography Foundation. This class is a wide ranging technical and conceptual introduction to photography. Through weekly projects, students will be exposed to 19th -21st century photo processes. Topics covered include cameras, lenses, software, darkroom overview, scanning, natural and artificial lighting, alternative processes as well as concepts such as selective focus, color temperature, composition. Short readings and in-class slide presentations on a diverse range of photographers will introduce students to the history of photography. This course will prepare students for upper level Photography classes at Brown and RISD.

VISA 0150. Digital 2D Foundation. This foundation studio course introduces the basic practices and concepts of two-dimensional digital media production including image acquisition, editing and manipulation, vector illustration, and preparation for online and offline viewing. Through studio exercises, readings, and assignments we will experiment with the production of electronic images. We will be looking at and producing work that is conscious and critical in nature, and which combines aspects of contemporary art, media, and technology. Collaboration and group work will be encouraged to share learning techniques and skill resources.

VISA 1110. Drawing I. Drawing from nature, still life, the model, and the imagination in a variety of media. A continuing series of outside assignments emphasized. Visits to galleries and museums and pertinent exhibitions may be undertaken. The portfolio of the individual student will be the basis of evaluation. Great emphasis is put on classroom participation. Prerequisite: VISA 0100. This course restricted to 20 students. 18 seats will be available during pre-registration. Students who are not admitted during pre-registration should attend the first meeting.

VISA 1120. Drawing II. Drawing from the imagination, the model, and landscapes in a variety of media. Great emphasis is placed on creative work and on classroom participation. Prerequisite: VISA 0100 or 0110. This course restricted to 20 students. 18 seats will be available during pre-registration. This class will satisfy VA concentration requirement for drawing. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting.

VISA 1210A. Big Woodcut. This class will work both in black and white, as well as in color, using a reduction process. The emphasis will be on printing on a large scale, using various types of paper. Much independent work will be required, along with participation in classroom discussions and critiques. Lottery for spaces reserved for nonconcentrators. Prerequisite: VISA 0100.

VISA 1240. Art of the Book. Will examine the book, structurally and conceptually, as artist’s medium. Students will learn the materials, tools and techniques of making books, as they explore the expressive and narrative possibilities of the book form. Topics and projects may include digital imaging, combining text and image, traditional binding or digital publishing. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting.

VISA 1250. Art of the Book. We will examine the artist’s book from the printer/publisher perspective. Students will learn the basics of book design, traditional typography & letterpress printing. Students will consider the book and its related printwork matter in service of its content, the course will be run as a fine press publishing house. Students will produce individual and group projects, including bookplates, broadsides, and books. Studio work will be augmented with field trips, artist visits, and guided exploration of the special collections at the John Hay Library. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting.

VISA 1310. Painting: Beginning to Intermediate. Painting for a variety of interests and aptitudes - basic instruction in media and painting procedure, emphasis on development of the image as a visual statement. Will build stretchers, cover basic color principles, and painting techniques. Images, related books, and articles are discussed. Individual criticism is given; participation in group discussions is required. Students not admitted during pre-registration should attend the first class.

VISA 1410. Sculpture: Material Investigations. This studio course addresses basic sculptural methods, i.e., additive & subtractive modeling, casting, and assemblage, and common sculptural materials, i.e., wood, metal, plaster, and found objects. Demos & workshops on a number of sculptural tools and materials form the foundation for this studio. Students develop sculptural solutions to a given set of problems. Contemporary issues raised in critiques and readings. Extensive outside work is expected. Students who are not admitted during pre-registration or were unable to pre-register should attend the first meeting of the class.

VISA 1420. Sculpture II: Conceptual Propositions. This studio course explores a number of contemporary sculptural theories and practices. Contemporary issues raised in critiques and readings. Completion of VISA 1410 is suggested, but not required. Demos and workshops on a number of tools and materials will be given as needed. Students may take this course more than once, as the problems can be customized for those with more experience. Extensive outside work expected. Please attend first day of class.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**VISA 1510. Black and White Photography.**
This course offers introduction to traditional black and white 35mm darkroom techniques, including processing film, silver gelatin printing and related techniques. While the class is primarily a studio course, it will be supplemented by weekly slide presentations and discussions of assigned readings. Slide presentations will focus on individual photographers in the history of the medium. Topics of discussion will include photographic genres, the photo essay, editing and sequencing a body of work, personal visions, social and political context, documentary versus art photography. Students may check out 35 mm film camera from the Dept.

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**VISA 1520. Digital Photography.**
Over 1.8 billion photographs are uploaded to the Internet each day. Since everyone’s a ‘photographer’, what type are you? While we constantly produce images for ourselves and others in private and public, this course will ask students to critically rethink this tool. Image-making, from “capture” to “color-correction” and beyond will be consciously addressed, as we approach photography from the perspective of contemporary art practice and produce a final portfolio of prints. Class will be discussion, slideshow, studio and critique. Prior experience in photography preferred not required. A digital SLR type camera may be checked out from the Department.

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<td>25134</td>
<td>MW</td>
<td>1:00-3:50</td>
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**VISA 1710. Site and Sound.**
This studio course provides an overview of contemporary sound art, facilitates the development of site-based sonic artwork, and encourages a critical approach to sound and audio practice. Work will be developed for and from specific sites with special emphasis placed on modes of listening and the physical characteristics of sound itself. Examples of site-specific sound work in a variety of formats including performance, installation, sculpture, literature, and radio are presented and analyzed.

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**VISA 1730. Exploration in Video Art.**
This studio course provides an overview of contemporary video art and video installation practices, facilitates the development of video work in expanded space, and encourages a critical approach to interactive moving image practice. Students will develop a set of video installation pieces for particular spaces and situations beyond the standard single-screen video format. Basic video production and post-production techniques will be covered and complimented by readings and screenings.

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**VISA 1800C. Honors Seminar.**
Required for students who have been accepted as candidates for honors. The seminar meets weekly to discuss readings and for group critiques. Includes group trips to New York and Boston, to visit galleries, museums, and artists’ studios. Instructor permission required. Must be accepted into Honors Program. WRIT.

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**VISA 1800L. Hybrid Art: Bricolage.**
The theme of the course is bricolage; a process which develops novel solutions to problems by making use of previously unrelated knowledge, ideas and objects.

We will utilize low tech materials on mid to large-scale three-dimensional work and will foster multidisciplinary studio practice. Students will be encouraged to take risks, cultivate new ideas and expand their creative process. Students must be highly motivated and committed to extensive work outside of class. Preference will be given to students with prior experience in sculpture.

First class List Art, Rm. 323 All other classes at the Tockwotton Studio

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**VISA 1800P. Art/Work: Professional Practice for Visual Artists.**
Visual artists don’t have agents or managers—you have to do it all yourself. This class covers business basics including tracking inventory and preparing invoices; taking legal precautions like registering a copyright and drafting consignment forms; using promotional tools; and making decisions such as choosing the right venue for your work. Grants, residencies, and relationships with galleries & nonprofit institutions will be discussed in depth. Work will emphasize community the practical, skills to thrive as a visual artist. Enrollment limited to 20 juniors and seniors in Visual Art. WRIT.

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<td>1:00-4:50</td>
<td>H. Bhandari</td>
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**VISA 1910. Individual Study Project in the Practice of Art.**
Work on an approved project leading to the presentation of a portfolio, under supervision of an individual member of the staff. Project proposals must be filed with the department no later than the first week of the semester. Section numbers vary by instructor.

**VISA 1990. Honors.**
Section numbers vary by instructor.

**VISA 2450. Exchange Scholar Program.**

**VISA XLIST. Courses of Interest to Visual Arts Concentrators.**

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Undergraduate Concentrations

Africana Studies

The concentration in Africana Studies critically examines the artistic, historical, literary, and theoretical expressions of the peoples and cultures of Africa and the African Diaspora. Central to the work of students and faculty in the concentration is the close collaboration of artists, scholars, and writers in examining relationships between academic and artistic knowledge about the world and human experience. Concentrators work closely with faculty members in developing new knowledge about the world and human existence through the critical and comprehensive study of the peoples and cultures of Africa and the African Diaspora. Concentrators are encouraged to study abroad in Africa, the Caribbean, and/or Latin America and to acquire language competency in a language other than English spoken in Africa and the diaspora.

In order to develop requisite competency, Africana Studies concentrators must complete eight (8) semester-long courses offered by or cross-listed with the Department. Concentrators may also petition the Department to accept other appropriate courses.

Of these courses, the following two Africana Studies courses are required:

- AFRI 0900 An Introduction to Africana Studies
- AFRI 1360 Africana Studies: Knowledge, Texts and Methodology—Senior Capstone Seminar (Spring ONLY)

The Department strongly encourages foreign study in Africa, the Caribbean, and Latin America, during the student’s junior year. While the department actively supports programs in South Africa, Tanzania, Ethiopia, Brazil, and the English-Speaking Caribbean, concentrators must complete at least six (6) courses in residence at Brown (that is, they must carry AFRI prefixes).

The Department also encourages the acquisition of language competencies, in addition to English, which are spoken in Africa and the Diaspora. Since no continental African language is currently offered at Brown, concentrators who study abroad and acquire certified competency in any African language are welcome to petition the department for competency credit.

For more information about the concentration, please contact Professor Lundy Braun (https://vivo.brown.edu/display/lbraun), Director of Undergraduate Studies.

Honors

Africana Studies’ concentrators with outstanding records may be admitted to the department’s Honors Program.

Students interested in pursuing honors should identify a faculty sponsor in Africana Studies in their 6th semester and begin working on their thesis project during the summer before their senior year. By the end of the second week of Semester I of their senior year, while working in consultation with a faculty advisor, the student must prepare a work plan/proposal. Please visit department website for proposal guidelines. This plan should include a timeline for completion of the thesis and is not to exceed (3) typewritten pages. The student should also identify a second reader at this point. The work plan/proposal must be approved and signed by a committee, comprised of the faculty advisor who is to direct the Honor’s thesis, the second reader, and the concentration advisor. The thesis sponsor should inform the Director of Undergraduate Studies by email after approval of the proposal.

By the time the proposal is submitted, the Honor’s candidate should be familiar with the secondary works in the field. (Secondary readings should be extensive and be incorporated into the proposal.) The Honor’s candidate is also expected to complete research paper of distinguished quality while enrolled in an independent study with their faculty advisor during the first semester of the senior year. In most cases, this paper will be one or two chapters in their thesis. Students must enroll in at least one, preferably two, semesters of independent study to work on their thesis.

For students completing graduation requirements by the end of Semester I (Fall), a first complete draft of the thesis should be completed by November 10, 2017. Final drafts must be submitted by December 1, 2017. For students completing graduation requirements by Semester II (Spring), the first complete draft of the thesis should be submitted by March 16, 2018. The final draft of the thesis should be submitted by April 20, 2018. Students must submit bound copies of the final thesis to the department and to each of the readers, along with an electronic copy of the completed thesis to Ms. Deborah Bowen. All students will present their thesis projects to the Department of Africana Studies on the last Friday of April at a time to be determined. After this presentation, a department committee will make recommendations for honors to the Director of Undergraduate Studies and students will receive notification of the recommendation.

American Studies

The concentration in American Studies seeks to understand American society and cultures as emerging from historical and contemporary processes at work in local, national, and global contexts. Concentrators study four broad themes: social structure and the practices of identity, space and place, production and consumption of culture, and science, technology, and everyday life. The concentration is predicated on the ideal of scholarly engagement with the public, so students take junior seminars that engage some aspect of the public humanities such as public policy, memorialization, community studies or civic engagement. Study abroad is supported and encouraged.

Interested students may contact Professor Haviland (beverly_haviland@brown.edu?subject=American Studies concentration), the director of undergraduate studies.

A concentrator in American Studies will be able to:

- Analyze texts, contexts, and data from multiple disciplinary and historical perspectives
- Synthesize research as verbal, visual and/or digital presentations
- Explore the theory and/or practice of the engagement of scholarship with a broader public
- Understand how American society and cultures have been and are being shaped by global flows of people, goods and ideas
- Experiment with new media as critical tools for scholarship

Concentrators have gone on to a vast variety of careers, including law, public humanities, politics, public service, academics, business, creative arts, and medicine.

Requirements:

Each concentrator will take 10 upper-level courses, four of which must be seminars, including a Junior Seminar and a Senior Seminar. In addition, students who wish to graduate with honors are required to take two semesters of AMST 1970 for a total of 12 credits.

Each concentrator will create an individual FOCUS consisting of at least three courses in consultation with the Concentration Advisor. The focus is the flexible core of the concentration. Here each student builds a coherent and dynamic interdisciplinary structure of related courses that develops his or her compelling interest in some aspect of American experience.

All seniors in the class of 2013 forward will be required to do a capstone electronic portfolio.

Some concentrators may elect to do an Honors Thesis and are encouraged to take AMST 1800, the Honors Seminar, in the Spring of their Junior year. Students pursuing honors are required to take two independent study courses in their senior year, in addition to the regular concentration requirements, in order to write their honors thesis.

Requirements for the American Studies Concentration

Junior Seminar: A course from the AMST 1700 Series, for example:

| AMST 1700B | Death and Dying in America |

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
American Studies at Brown is concerned with four broad themes:

- **Social Structures and the Practices of Identity:** How do organizations and institutions function socially and culturally? How do people represent their experiences and ideas as culture? How is culture transmitted, appropriated and consumed? What is the role of artists and the expressive arts, including literature, visual arts and performance?

- **Space and Place:** How is space organized, and how do people make their experiences and ideas as culture? How is culture transmitted, appropriated and consumed? What is the role of artists and the expressive arts, including literature, visual arts and performance?

- **Cultural and Social Analysis:** Reading and analyzing different kinds of texts, including literary, visual, aural, oral, material objects and landscapes. Examining ethnic and racial groups, institutions, organizations and social movements.

- **Global/International Contextualization:** Comprehending the United States as a society and culture that has been shaped by the historical and contemporary flows of people, goods and ideas from around the world and in turn, learning about the various ways in which America has shaped the world.

American Studies at Brown emphasizes four intersecting approaches that are critical tools for understanding these themes:

- **Space and Place:** How is space organized, and how do people make their experiences and ideas as culture? How is culture transmitted, appropriated and consumed? What is the role of artists and the expressive arts, including literature, visual arts and performance?

- **Cultural and Social Analysis:** Reading and analyzing different kinds of texts, including literary, visual, aural, oral, material objects and landscapes. Examining ethnic and racial groups, institutions, organizations and social movements.

- **Global/International Contextualization:** Comprehending the United States as a society and culture that has been shaped by the historical and contemporary flows of people, goods and ideas from around the world and in turn, learning about the various ways in which America has shaped the world.

- **New Media Understandings:** Understanding the creation of new forms of discourse, new ways of knowing and new modes of social organization made possible by succeeding media revolutions. Using new media as a critical tool for scholarship.

- **Publicly Engaged Scholarship:** Connecting the theory and the practice of publicly-engaged research, understanding and presentation, from community-based scholarship to ethnography, oral history, and museum exhibits. Civic engagement might include structed and reflective participation in a local community or communities or the application of general theoretical knowledge to understanding social issues.

### WHAT we study

- **Social Structures and the Practices of Identity:**
  - **Slavery, and Citizenship:**
  - **Race and Remembering:**
  - **Public Memory: Narratives of 9/11:**
  - **Immersing, Exiles, Refugees, and Citizenship:**
  - **Latina/o Religions: Encounters of:
    - China in the American Imagination
    - Ethnicity, Identity and Culture in 20th Century New York City
    - Ethnicity, Identity and Culture in 20th Century New York City
    - Latino/a Cultural Theory
    - Race, Immigration and Citizenship
    - The Problem of Class in America
    - America and the Asian Pacific: A Cultural History
    - Narratives of Slavery
    - America as a Trans-Pacific Culture
    - Transnational Popular Culture
    - Movements, Morals, and Markets
    - Latin/o/a Cultural Theory
    - Race, Immigration and Citizenship
    - China in the American Imagination
    - Cold War Culture The American Culture in the Cold War
    - Ethnicity, Identity and Culture in 20th Century New York City
    - Filipino American Cultures
    - Essaying Culture
    - From Perry to Pokemon: Japan in the United States, the United States in Japan
    - Gender, Race, and Class in the United States
    - Green Cities: Parks and Designed Landscapes in Urban America
    - Immigrant Radicals: Asian Political Movements in the Americas 1850-1970
    - Immigrants, Exiles, Refugees, and Citizens in the Americas
    - Latina Literature: The Shifting Boundaries of Identity
    - Latin/o/a Religions: Encounters of Contestations and Transformations
    - Latino New York
    - Latinos and Film
    - Topics in Material Culture Studies: The Arts and Crafts Movement in America 1880-1920
    - Education Beyond the Classroom Walls: Teaching and Learning in Cultural Institutions
    - Sports in American Society
    - Health and Healing in American History
    - Trauma and the Shame of the Unspeakable: The Holocaust, American Slavery, and Childhood Sexual Abuse
    - Motherhood in Black and White
    - Radio: From Hams to Podcasts
    - Decolonizing Minds: A People's History of the World
    - Transpacific Popular Culture
    - War and the Mind in Modern America

- **Space and Place:**
  - **AMST 1700**
  - **AMST 1800**
  - **AMST 1900**
  - **AMST 1901**
  - **AMST 1902**
  - **AMST 1903**
  - **AMST 1904**
  - **AMST 1905**
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  - **AMST 1942**
  - **AMST 1943**
  - **AMST 1944**
  - **AMST 1945**
  - **AMST 1946**
  - **AMST 1947**
  - **AMST 1948**
  - **AMST 1949**
  - **AMST 1950**
  - **AMST 1951**
  - **AMST 1952**
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  - **AMST 1954**
  - **AMST 1955**
  - **AMST 1956**
  - **AMST 1957**
  - **AMST 1958**
  - **AMST 1959**
  - **AMST 1960**
  - **AMST 1961**
  - **AMST 1962**
  - **AMST 1963**
  - **AMST 1964**
  - **AMST 1965**
  - **AMST 1966**
  - **AMST 1967**
  - **AMST 1968**
  - **AMST 1969**
  - **AMST 1970**

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Anthropology

Anthropology is the study of human beings from all times and all places, offering holistic, comparative, international, and humanistic perspective. In studying and interpreting the vast range of similarities and differences in human societies and cultures, anthropologists also seek to understand how people themselves make sense of the world in which they live. The Department of Anthropology at Brown is a vibrant, award-winning group of scholars working primarily in the subfields of cultural anthropology, archaeology, and anthropological linguistics. The concentration provides students with a broad introduction to the discipline and includes the major subdisciplines of the field: sociocultural anthropology, archaeology, anthropological linguistics, and biological anthropology. The department also allows students to pursue the Engaged Scholars Program (https://www.brown.edu/academics/college/special-programs/public-service/engaged-scholars-program). ESP is for students with an interest in making deeper connections between their concentration curriculum and long-term engaged activities such as internships, public service, humanitarian and development work, archaeological excavations, and many other possible forms of community involvement.

Concentrators should select their courses in anthropology in consultation with the concentration advisor. At least nine courses in anthropology are required, including:

Select one of the following sociocultural/linguistic anthropology classes:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0100</td>
<td>Introduction to Cultural Anthropology</td>
</tr>
<tr>
<td>ANTH 0110</td>
<td>Anthropology and Global Social Problems: Environment, Development, and Governance</td>
</tr>
</tbody>
</table>

Select one of the following biological anthropology/archaeology classes:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0200</td>
<td>Culture and Human Behavior</td>
</tr>
<tr>
<td>ANTH 0300</td>
<td>Culture and Health</td>
</tr>
<tr>
<td>ANTH 0800</td>
<td>Sound and Symbols: Introduction to Linguistic Anthropology</td>
</tr>
</tbody>
</table>

Select one of the following, normally taken in junior or sophomore year:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 1621</td>
<td>Material Culture Practicum</td>
</tr>
<tr>
<td>ANTH 1900</td>
<td>History of Anthropology: Anthropological Theories</td>
</tr>
<tr>
<td>ANTH 1940</td>
<td>Ethnographic Research Methods</td>
</tr>
<tr>
<td>ANTH 1950</td>
<td>Archaeological Field Work</td>
</tr>
</tbody>
</table>

A course from the ANTH 1910 Series (Normally taken in senior year)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 1910</td>
<td>Introduction to Cultural Anthropology</td>
</tr>
<tr>
<td>ANTH 1911</td>
<td>Anthropology and Global Social Problems: Environment, Development, and Governance</td>
</tr>
</tbody>
</table>

Five additional Anthropology courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 9

Honors

Candidates for honors should apply to the concentration advisor by the end of his or her 6th semester, but no later than the 4th week of the 7th semester. An application consists of a brief statement addressing the focus of a proposed thesis and the names and signatures of two faculty members from the Department of Anthropology who have agreed to serve as the student's honors committee—one as honors thesis advisor, the other as a reader. Candidates for honors are required to:

1. Fulfill the standard concentration requirements.
2. Take two additional courses, usually, which may be used for thesis preparation.
3. Have a majority of A's in the concentration.
4. Submit an approved honors thesis.

Field Work

Concentrators interested in archaeology are urged to obtain training in field archaeology by participating in Brown-sponsored field research, or by participating in an archaeological field school elsewhere.

Applied Mathematics

The concentration in Applied Mathematics allows students to investigate the mathematics of problems arising in the physical, life and social sciences as well as in engineering. The basic mathematical skills of Applied Mathematics come from a variety of sources, which depend on the problems of interest: the theory of ordinary and partial differential equations, matrix theory, statistical sciences, probability and decision theory, risk and insurance analysis, among others. Applied Mathematics appeals to people with a variety of different interests, ranging from those with a desire to obtain a good quantitative background for use in some future career, to those who are interested in the basic techniques and approaches in themselves. The standard concentration leads to either the A.B. or Sc.B. degree. Students may also choose to pursue a joint program with biology, computer science or economics. The undergraduate concentration guide is available here (http://www.brown.edu/academics/applied-mathematics/undergraduate).

Both the A.B. and Sc.B. concentrations in Applied Mathematics require certain basic courses to be taken, but beyond this there is a great deal of flexibility as to which areas of application are pursued. Students are encouraged to take courses in applied mathematics, mathematics and one or more of the application areas in the natural sciences, social sciences or engineering. Whichever areas are chosen should be studied in some depth.

Standard program for the A.B. degree.

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Ten additional semester courses approved by the Division of Applied Mathematics. These classes must include:</td>
</tr>
<tr>
<td>&amp; MATH 1000</td>
<td>MATH 0180 Intermediate Calculus 1</td>
</tr>
<tr>
<td></td>
<td>MATH 0520 Linear Algebra 2</td>
</tr>
<tr>
<td></td>
<td>Select one course on programming from the following: 4</td>
</tr>
<tr>
<td></td>
<td>APMA 0090 Introduction to Mathematical Modelling 1</td>
</tr>
<tr>
<td></td>
<td>APMA 0160 Introduction to Scientific Computing</td>
</tr>
<tr>
<td></td>
<td>CSCI 0040 Introduction to Object-Oriented Programming and Computer Science</td>
</tr>
<tr>
<td></td>
<td>CSCI 0150 Introduction to Computer Science: An Integrated Introduction</td>
</tr>
<tr>
<td></td>
<td>Five additional courses, of which four should be chosen from the 1000-level courses taught by the Division of Applied Mathematics.</td>
</tr>
<tr>
<td></td>
<td>Total Credits 10</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Applied Mathematics-Biology

The Applied Math - Biology concentration recognizes that mathematics is essential to address many modern biological problems in the post genomic era. Specifically, high throughput technologies have rendered vast new biological data sets that require novel analytical skills for the most basic analyses. These technologies are spawning a new “data-driven” paradigm in the biological sciences and the fields of bioinformatics and systems biology. The foundations of these new fields are inherently mathematical, with a focus on probability, statistical inference, and systems dynamics. These mathematical methods apply very broadly in many biological fields including some like population growth, spread of disease, that predate the genomics revolution. Nevertheless, the application of these methods in areas of biology from molecular genetics to evolutionary biology has grown very rapidly in with the availability of vast amounts of genomic sequence data. Required coursework in this program aims at ensuring expertise in mathematical and statistical sciences, and their application in biology. The students will focus in particular areas of biology. The program culminates in a senior capstone experience that pairs student and faculty in creative research collaborations.

Standard program for the Sc.B. degree

Required coursework in this program aims at ensuring expertise in mathematical and statistical sciences, and their application in biology. The students will focus in particular areas of biology. The program culminates in a senior capstone experience that pairs student and faculty in creative research collaborations. Applied Math – Biology concentrators are prepared for careers in medicine, public health, industry and academic research.

**Required Courses:**

Students are required to take all of the following courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0900</td>
<td>Introductory Calculus, Part I</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1000</td>
<td>Introductory Calculus, Part II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0180</td>
<td>Intermediate Calculus</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
<td>1</td>
</tr>
<tr>
<td>APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
<td>2</td>
</tr>
<tr>
<td>&amp; APMA 0360</td>
<td>and Applied Partial Differential Equations</td>
<td>2</td>
</tr>
<tr>
<td>Select one senior seminar from the APMA 1930 or APMA 1940 series, or an approved equivalent.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Select one course on programming from the following:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>APMA 0090</td>
<td>Introduction to Mathematical Modeling</td>
<td></td>
</tr>
<tr>
<td>APMA 0160</td>
<td>Introduction to Scientific Computing</td>
<td></td>
</tr>
<tr>
<td>CSCI 0040</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
<td></td>
</tr>
<tr>
<td>CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
<td></td>
</tr>
</tbody>
</table>

Ten additional courses, of which six should be chosen from the 1000-level or higher level courses taught by the Division of Applied Mathematics.

**Total Credits**: 18

1. Substitution of alternate courses for the specific requirements is subject to approval by the division.
2. Concentrators are urged to consider MATH 0540 as an alternative to MATH 0520.
3. APMA 0330, APMA 0340 will sometimes be accepted as substitutes for APMA 0350, APMA 0360.
4. Concentrators are urged to complete their introductory programming course before the end of their sophomore year.

**Areas of Emphasis and Suggested Courses:**

Some areas of possible emphasis for focusing of elective courses are listed below. Given the large number of course offerings in the biosciences and neuroscience, students are free to explore classes in these areas that are not listed below. However, all classes must be approved by the concentration advisor.

**Biochemistry**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0280</td>
<td>Introductory Biochemistry</td>
</tr>
<tr>
<td>BIOL 1270</td>
<td>Advanced Biochemistry</td>
</tr>
<tr>
<td>CHEM 0350/0360</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>CHEM 1230</td>
<td>Chemical Biology</td>
</tr>
</tbody>
</table>

**Biotechnology and Physiology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0800</td>
<td>Principles of Physiology</td>
</tr>
<tr>
<td>BIOL 1100</td>
<td>Cell Physiology and Biophysics</td>
</tr>
<tr>
<td>and/or appropriate bioengineering courses, such as:</td>
<td></td>
</tr>
<tr>
<td>BIOL 1090</td>
<td>Polymer Science for Biomaterials</td>
</tr>
<tr>
<td>BIOL 1120</td>
<td>Biomaterials</td>
</tr>
<tr>
<td>BIOL 1140</td>
<td>Tissue Engineering</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Undergraduate Concentrations

BIOL 1150  Stem Cell Engineering
BIOL 1210  Synthetic Biological Systems
Ecology, Evolution, and Genetics
BIOL 0410  Invertebrate Zoology
& BIOL 0480  and Evolutionary Biology
BIOL 0420  Principles of Ecology
& BIOL 0430  and The Evolution of Plant Diversity
BIOL 0470  Genetics
BIOL 1420  Experimental Design in Ecology
BIOL 1430  Population Genetics
BIOL 1465  Human Population Genomics
BIOL 1540  Molecular Genetics
Neuroscience
APMA 0410  Mathematical Methods in the Brain Sciences
Neurosciences courses: See https://www.brown.edu/academics/neuroscience/undergraduate/neuroscience-concentration-requirements
BIOL 1100  Cell Physiology and Biophysics
BIOL 1110  Topics in Signal Transduction
BIOL 1190  Synaptic Transmission and Plasticity

Total Credits 18

1 Students whose independent study is expected to be in an experimental field are strongly encouraged to take APMA 1660, which covers experimental design and the analysis of variance (ANOVA), a method commonly used in the analysis of experimental data.

Honors

Requirements and Process: Honors in the Applied Math-Biology concentration is based primarily upon an in-depth, original research project carried out under the guidance of a Brown (and usually Applied Math or BioMed) affiliated faculty advisor. Projects must be conducted for no less than two full semesters, and student must register for credit for the project via APMA 1660 or BIOL 1950/BIOL 1960 or similar independent study courses. The project culminates in the writing of a thesis which is reviewed by the thesis advisor and a second reader. It is essential that the student have one advisor from the biological sciences and one in Applied Mathematics. The thesis work must be presented in the form of an oral or presentation (arranged with the primary thesis advisor) or posted at the annual Undergraduate Research Day in either Applied Mathematics or Biology. For information on registering for BIOL 1950/BIOL 1960, please see https://www.brown.edu/academics/biology/undergraduate-education/undergraduate-research

Excellence in grades within the concentration as well as a satisfactory evaluation by the advisors are also required for Honors. The student's grades must place them within the upper 20% of their cohort, in accordance with the university policy on honors. Honors recipients typically maintain a Grade Point Average of 3.4 or higher in the concentration. However, in the case of outstanding independent research as demonstrated in the thesis and supported by the Thesis Committee, candidates with a GPA between 3.0 an 3.4 will be considered and are encouraged to apply.

The deadline for applying to graduate with honors in the concentration are the same as those of the biology concentrations. However, students in the joint concentration must inform the undergraduate chair in Applied Mathematics of their intention to apply for honors by these dates.

Applied Mathematics-Computer Science

The Sc.B. concentration in Applied Math-Computer Science provides a foundation of basic concepts and methodology of mathematical analysis and computation and prepares students for advanced work in computer science, applied mathematics, and scientific computation. Concentrators must complete courses in mathematics, applied math, computer science, and an approved English writing course. While the concentration in Applied Math-Computer Science allows students to develop the use of quantitative methods in thinking about and solving problems, knowledge that is valuable in all walks of life, students who have completed the concentration have pursued graduate study, computer consulting and information industries, and scientific and statistical analysis careers in industry or government. This degree offers a standard track and a professional track.

Requirements for the Standard Track of the Sc.B. degree.

Prerequisites - two semesters of Calculus, for example

MATH 0090 & MATH 0100  Introductory Calculus, Part I
& Introductory Calculus, Part II
MATH 0170  Advanced Placement Calculus

Concentration Requirements (17 courses)

Core-Math:

MATH 0180  Intermediate Calculus
or MATH 0350  Honors Calculus
MATH 0520  Linear Algebra
or MATH 0540  Honors Linear Algebra
or CSCI 0530  Directions: The Matrix in Computer Science

Core-Applied Mathematics:

APMA 0350  Applied Ordinary Differential Equations
APMA 0360  Applied Partial Differential Equations I
APMA 1170  Introduction to Computational Linear Algebra
or APMA 1180  Introduction to Numerical Solution of Differential Equations

Core-Computer Science:

Select one of the following Series:

Series A
CSCI 0150 & CSCI 0160  Introduction to Object-Oriented Programming and Computer Science and Introduction to Algorithms and Data Structures

Series B
CSCI 0170 & CSCI 0180  Computer Science: An Integrated Introduction and Computer Science: An Integrated Introduction

Series C
CSCI 0190  Accelerated Introduction to Computer Science (and an additional CS course not otherwise used to satisfy a concentration requirement; (this course may be CSCI 0180, an intermediate-level CS course, or a 1000-level course)

Select three of the following intermediate-level courses, one of which must be math-oriented and one systems-oriented:

CSCI 0220  Introduction to Discrete Structures and Probability (math)
CSCI 0320  Introduction to Software Engineering (systems)
CSCI 0330  Introduction to Computer Systems
CSCI 1010  Theory of Computation

Three 1000-level Computer Science courses. These three courses must include a pair of courses with a coherent theme. A list of approved pairs may be found at the approved-pairs web page. You are not restricted to the pairs on this list, but any pair not on the list must be approved by the director of undergraduate studies.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Three 1000-level Applied Mathematics courses approved by the concentration advisor, of which two should constitute a standard sequence or address a common theme. Typical sequences include: APMA 1200/1210 and APMA 1650 or 1655/1660.

A capstone course: a one-semester course, normally taken in the student's last undergraduate year, in which the student (or group of students) use a significant portion of their undergraduate education, broadly interpreted, in studying some current topic in depth, to produce a culminating artifact such as a paper or software project.

Note: CSCI 1450 may be used either as a math-oriented core course or as an advanced course. CSCI 1450 was formerly known as CSCI 450: they are the same course and hence only one may be taken for credit. Applied Math 1650 or Applied Math 1655 may be used in place of CSCI 1450. However, concentration credit will be given for only one of Applied Math 1650, 1655 and CSCI 1450.

Total Credits 17

Requirements for the Professional Track of the Sc.B. degree.

The requirements for the professional track include all those of the standard track, as well as the following:

Students must complete two two-to-four-month full-time professional experiences, doing work that is related to their concentration programs. Such work is normally done within an industrial organization, but may also be at a university under the supervision of a faculty member.

On completion of each professional experience, the student must write and upload to ASK a reflective essay about the experience addressing the following prompts, to be approved by the student’s concentration advisor:

- Which courses were put to use in your summer’s work? Which topics, in particular, were important?
- In retrospect, which courses should you have taken before embarking on your summer experience? What are the topics from these courses that would have helped you over the summer if you had been more familiar with them?
- Are there topics you should have been familiar with in preparation for your summer experience, but are not taught at Brown? What are these topics?
- What did you learn from the experience that probably could not have been picked up from course work?
- Is the sort of work you did over the summer something you would like to continue doing once you graduate? Explain.
- Would you recommend your summer experience to other Brown students? Explain.

Applied Mathematics-Economics

The Applied Mathematics-Economics concentration is designed to reflect the mathematical and statistical nature of modern economic theory and empirical research. This concentration has two tracks. The first is the advanced economics track, which is intended to prepare students for graduate study in economics. The second is the mathematical finance track, which is intended to prepare students for graduate study in economics, or for careers in finance or financial engineering. Both tracks have A.B. degree versions and Sc.B. degree versions, as well as a Professional track option.

Standard Program for the A.B. degree (Advanced Economics track):

Prerequisites:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0200</td>
<td>1</td>
</tr>
</tbody>
</table>

Course Requirements:

Applied Mathematics Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0350</td>
<td>1</td>
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<tr>
<td>APMA 0360</td>
<td>1</td>
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</tbody>
</table>

Select one of the following:

- APMA 0160 Introduction to Scientific Computing (preferred)
- CSCI 0040 Introduction to Scientific Computing and Problem Solving (preferred)
- CSCI 0150 Introduction to Object-Oriented Programming and Computer Science
- CSCI 0170 Computer Science: An Integrated Introduction

Select one of the following:

- APMA 1200 Operations Research: Probabilistic Models
- APMA 1210 Operations Research: Deterministic Models
- APMA 1650 Statistical Inference I
- APMA 1655 Statistical Inference I

Select one of the following:

- APMA 1200 Operations Research: Probabilistic Models
- APMA 1210 Operations Research: Deterministic Models
- APMA 1660 Statistical Inference II
- APMA 1670 Statistical Analysis of Time Series
- APMA 1680 Nonparametric Statistics
- APMA 1690 Computational Probability and Statistics
- APMA 1700 The Mathematics of Insurance
- APMA 1740 Recent Applications of Probability and Statistics
- MATH 1010 Analysis: Functions of One Variable

Economics Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1130</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1630</td>
<td>1</td>
</tr>
<tr>
<td>Two 1000-level courses from the &quot;mathematical-economics&quot; group: 1</td>
<td></td>
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<tr>
<td>ECON 1170</td>
<td>1</td>
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<tr>
<td>ECON 1225</td>
<td>1</td>
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<td>ECON 1465</td>
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<td>ECON 1850</td>
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<td>ECON 1860</td>
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<tr>
<td>ECON 1870</td>
<td>1</td>
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</tbody>
</table>

One 1000-level course from the "data methods" group: 1

- ECON 1305 Economics of Education: Research
- ECON 1310 Labor Economics
- ECON 1360 Health Economics
- ECON 1410 Urban Economics

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ECON 1510 Economic Development
ECON 1520 The Economic Analysis of Institutions
ECON 1530 Health, Hunger and the Household in Developing Countries
ECON 1640 Econometrics II
ECON 1650 Financial Econometrics
ECON 1759 Data, Statistics, Finance
ECON 1765 Finance, Regulation, and the Economy: Research

One additional 1000-level economics course

Total Credits 13

1. No course may be used to simultaneously satisfy (a) and (b).
2. APMA 0330 and APMA 0340 may be substituted with advisor approval.
3. Or ECON 1110 with permission.
4. No course may be used to simultaneously satisfy the "mathematical economics" and the "data methods" requirements.

Standard program for the Sc.B. degree (Advanced Economics track):

Prerequisites:
MATH 0100 Introductory Calculus, Part II
MATH 0520 Linear Algebra

Course Requirements:
Applied Mathematics Requirements
(a) 1
APMA 0350 & APMA 0360 Applied Ordinary Differential Equations and Applied Partial Differential Equations I 2

Select one of the following:
1
APMA 0160 Introduction to Scientific Computing (preferred)
CSCI 0040 Introduction to Scientific Computing and Problem Solving (preferred)
CSCI 0150 Introduction to Object-Oriented Programming and Computer Science
CSCI 0170 Computer Science: An Integrated Introduction

Select one of the following:
1
APMA 1200 Operations Research: Probabilistic Models
APMA 1210 Operations Research: Deterministic Models
APMA 1650 Statistical Inference I
or APMA 1655 Statistical Inference I

(b) 1
Select two of the following:
2
APMA 1200 Operations Research: Probabilistic Models
APMA 1210 Operations Research: Deterministic Models
APMA 1660 Statistical Inference II
APMA 1670 Statistical Analysis of Time Series
APMA 1690 Nonparametric Statistics
APMA 1700 The Mathematics of Insurance
APMA 1740 Recent Applications of Probability and Statistics
MATH 1010 Analysis: Functions of One Variable

Economics Requirements:
ECON 1130 Intermediate Microeconomics (Mathematical) 3

ECON 1210 Intermediate Macroeconomics 1
ECON 1630 Econometrics I 1
Three 1000-level courses from the "mathematical-economics" group: 4
ECON 1170 Welfare Economics and Social Choice Theory
ECON 1225 Advanced Macroeconomics: Monetary, Fiscal, and Stabilization Policies
ECON 1465 Market Design: Theory and Applications
ECON 1470 Bargaining Theory and Applications
ECON 1640 Econometrics II
ECON 1650 Financial Econometrics
ECON 1660 Big Data
ECON 1750 Investments II
ECON 1759 Data, Statistics, Finance
ECON 1810 Economics and Psychology
ECON 1820 Behavioral Economics
ECON 1850 Theory of Economic Growth
ECON 1860 The Theory of General Equilibrium
ECON 1870 Game Theory and Applications to Economics

One 1000-level course from the "data methods" group: 4
ECON 1305 Economics of Education: Research
ECON 1310 Labor Economics
ECON 1360 Health Economics
ECON 1410 Urban Economics
ECON 1510 Economic Development
ECON 1520 The Economic Analysis of Institutions
ECON 1530 Health, Hunger and the Household in Developing Countries
ECON 1640 Econometrics II
ECON 1650 Financial Econometrics
ECON 1759 Data, Statistics, Finance
ECON 1765 Finance, Regulation, and the Economy: Research

Two additional 1000-level economics courses
2
Total Credits 16

1. No course may be used to simultaneously satisfy (a) and (b).
2. APMA 0330 and APMA 0340 may be substituted with advisor approval.
3. Or ECON 1110 with permission.
4. No course may be used to simultaneously satisfy the "mathematical economics" and the "data methods" requirements.

Standard program for the A.B. degree (Mathematical Finance track):

Prerequisites:
MATH 0100 Introductory Calculus, Part II
MATH 0520 Linear Algebra

Course Requirements:
Applied Mathematics Requirements
(a)
APMA 0350 & APMA 0360 Applied Ordinary Differential Equations and Applied Partial Differential Equations I 1

Select one of the following:
1
APMA 0160 Introduction to Scientific Computing (preferred)
CSCI 0040 Introduction to Scientific Computing and Problem Solving (preferred)

Two additional 1000-level economics courses
2

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Select one 1000-level course from the "data methods" group: ²

1. ECON 1305 Economics of Education: Research
2. ECON 1310 Labor Economics
3. ECON 1360 Health Economics
4. ECON 1410 Urban Economics
5. ECON 1510 Economic Development
6. ECON 1520 The Economic Analysis of Institutions
7. ECON 1530 Health, Hunger and the Household in Developing Countries
8. ECON 1640 Econometrics II
9. ECON 1650 Financial Econometrics
10. ECON 1759 Data, Statistics, Finance
11. ECON 1765 Finance, Regulation, and the Economy: Research

Total Credits: 13

1. APMA 0330 and APMA 0340 may be substituted with advisor approval.
2. No course may be used to simultaneously satisfy the "financial economics," the "mathematical economics," or the "data methods" requirements.
3. Or ECON 1110 with permission.

Standard program for the Sc.B. degree (Mathematical Finance track):

Prerequisites:
1. MATH 0100 Introductory Calculus, Part II
2. MATH 0520 Linear Algebra

Course Requirements:

Applied Mathematics requirements:

(a) APMA 0350 & APMA 0360 Applied Ordinary Differential Equations and Applied Partial Differential Equations I

Select one of the following: 1

1. APMA 0160 Introduction to Scientific Computing (preferred)
2. APMA 0340 Introduction to Scientific Computing and Problem Solving (preferred)
3. APMA 1170 Computer Science: An Integrated Introduction
4. APMA 0350 Introduction to Numerical Solution of Differential Equations
5. CSCI 0040 Introduction to Scientific Computing and Problem Solving (preferred)
6. CSCI 0150 Introduction to Object-Oriented Programming and Computer Science
7. CSCI 0170 Computer Science: An Integrated Introduction
8. APMA 1200 Operations Research: Probabilistic Models
9. APMA 1650 Statistical Inference I
10. APMA 1655 Statistical Inference I
11. APMA 1660 Statistical Inference II
12. APMA 1670 Statistical Analysis of Time Series
13. APMA 1680 Nonparametric Statistics
14. APMA 1700 The Mathematics of Insurance
15. APMA 1720 Monte Carlo Simulation with Applications to Finance (preferred)
16. APMA 1740 Recent Applications of Probability and Statistics
17. MATH 1010 Analysis: Functions of One Variable

Select one 1000-level course from the "financial economics" group: ²

1. ECON 1130 Intermediate Microeconomics (Mathematical)
2. ECON 1210 Intermediate Macroeconomics 1
3. ECON 1650 Financial Econometrics
4. ECON 1750 Investments II
5. ECON 1759 Data, Statistics, Finance
6. ECON 1760 Financial Institutions
7. ECON 1765 Finance, Regulation, and the Economy: Research
8. ECON 1770 Fixed Income Securities
9. ECON 1780 Corporate Governance and Management
10. ECON 1810 Economics and Psychology
11. ECON 1820 Behavioral Economics
12. ECON 1850 Theory of Economic Growth
13. ECON 1860 The Theory of General Equilibrium
14. ECON 1870 Game Theory and Applications to Economics

Total Credits: 13

1. APMA 0330 and APMA 0340 may be substituted with advisor approval.
2. No course may be used to simultaneously satisfy the "financial economics," the "mathematical economics," or the "data methods" requirements.
3. Or ECON 1110 with permission.

Select two of the following: ²

1. APMA 1700 The Mathematics of Insurance
2. APMA 1720 Monte Carlo Simulation with Applications to Finance (preferred)
3. APMA 1740 Recent Applications of Probability and Statistics
4. MATH 1010 Analysis: Functions of One Variable

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Economics Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1130</td>
<td>Intermediate Microeconomics (Mathematical)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>Intermediate Macroeconomics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1630</td>
<td>Econometrics I</td>
<td>1</td>
</tr>
</tbody>
</table>

Select three 1000-level courses from the "financial economics" group: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1650</td>
<td>Financial Econometrics</td>
</tr>
<tr>
<td>ECON 1710</td>
<td>Investments I</td>
</tr>
<tr>
<td>ECON 1720</td>
<td>Corporate Finance</td>
</tr>
<tr>
<td>ECON 1730</td>
<td>Entrepreneurial Finance and Venture Capital</td>
</tr>
<tr>
<td>ECON 1750</td>
<td>Investments II</td>
</tr>
<tr>
<td>ECON 1759</td>
<td>Data, Statistics, Finance</td>
</tr>
<tr>
<td>ECON 1760</td>
<td>Financial Institutions</td>
</tr>
<tr>
<td>ECON 1765</td>
<td>Finance, Regulation, and the Economy: Research</td>
</tr>
<tr>
<td>ECON 1770</td>
<td>Fixed Income Securities</td>
</tr>
<tr>
<td>ECON 1780</td>
<td>Corporate Strategy</td>
</tr>
<tr>
<td>ECON 1790</td>
<td>Corporate Governance and Management</td>
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</tbody>
</table>

Select two 1000-level courses from the "mathematical economics" group: 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1170</td>
<td>Welfare Economics and Social Choice Theory</td>
</tr>
<tr>
<td>ECON 1225</td>
<td>Advanced Macroeconomics: Monetary, Fiscal, and Stabilization Policies</td>
</tr>
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<td>ECON 1850</td>
<td>Theory of Economic Growth</td>
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<tr>
<td>ECON 1860</td>
<td>The Theory of General Equilibrium</td>
</tr>
<tr>
<td>ECON 1870</td>
<td>Game Theory and Applications to Economics</td>
</tr>
</tbody>
</table>

Select one 1000-level course from the "data methods" group: 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1305</td>
<td>Economics of Education: Research</td>
</tr>
<tr>
<td>ECON 1310</td>
<td>Labor Economics</td>
</tr>
<tr>
<td>ECON 1360</td>
<td>Health Economics</td>
</tr>
<tr>
<td>ECON 1410</td>
<td>Urban Economics</td>
</tr>
<tr>
<td>ECON 1510</td>
<td>Economic Development</td>
</tr>
<tr>
<td>ECON 1520</td>
<td>The Economic Analysis of Institutions</td>
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<td>ECON 1530</td>
<td>Health, Hunger and the Household in Developing Countries</td>
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<td>Financial Econometrics</td>
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<tr>
<td>ECON 1759</td>
<td>Data, Statistics, Finance</td>
</tr>
<tr>
<td>ECON 1765</td>
<td>Finance, Regulation, and the Economy: Research</td>
</tr>
</tbody>
</table>

Honors and Capstone Requirement

Admission to candidacy for honors in the concentration is granted on the following basis: 3.7 GPA for Economics courses, and a 3.5 GPA overall. To graduate with honors, a student must write an honors thesis in the senior year following the procedures specified by the concentration (see Economics Department website). Beginning with the class of 2016, students not writing an honors thesis must complete an alternative senior capstone project and obtain the approval of a faculty sponsor.

Professional Track

The requirements for the professional track include all those of the standard track, as well as the following:

- Students must complete two two-to-four month full-time professional experiences, doing work that is related to their concentration programs. Such work is normally done within an industrial organization, but may also be at a university under the supervision of a faculty member.

On completion of each professional experience, the student must write and upload to ASK a reflective essay about the experience addressing the following prompts, to be approved by the student's concentration advisor:

- Which courses were put to use in your summer's work? Which topics, in particular, were important?
- In retrospect, which courses should you have taken before embarking on your summer experience? What are the topics from these courses that would have helped you over the summer if you had been more familiar with them?
- Are there topics you should have been familiar with in preparation for your summer experience, but are not taught at Brown? What are these topics?
- What did you learn from the experience that probably could not have been picked up from course work?
- Is the sort of work you did over the summer something you would like to continue doing once you graduate? Explain.
- Would you recommend your summer experience to other Brown students? Explain.

Archaeology and the Ancient World

The concentration in Archaeology and the Ancient World provides an opportunity to explore the multi-faceted discipline of archaeology while examining the critical early civilizations of the so-called 'Old World'—that is, the complex societies of the Mediterranean, Egypt, and Ancient Western Asia. Students will learn about the art, architecture, and material culture of the ancient world, exploring things of beauty and power, as well as the world of the everyday. Concentrators will also learn "how to do" archaeology - the techniques of locating, retrieving and analyzing ancient remains - and consider how material culture shapes our understanding of the past. Concentrators are encouraged to pursue research opportunities through summer fieldwork, museum experience, or independent study projects.

While the core focus of Archaeology and the Ancient World at Brown University is archaeology and art of the ancient Mediterranean, Egypt, and the Near East, this concentration encourages students to reach beyond this geographic area, to engage with Brown's many strengths in history, epigraphy, art, ethics, engineering, religious studies, and the sciences – to name just a few. The concentration, with its three distinct but overlapping tracks, is intended to allow students flexibility in structuring their own path through this diverse field of study. All three tracks begin with the same foundation. Students are then expected to experiment with and define their own areas of specialty, establishing expertise in topics such as cultural heritage, archaeological theory, or materials analysis, or in particular regions or time periods. The concentration is also designed to allow students to build progressively upon what they have learned, moving from introductory courses to upper-level seminars. It is expected that, in completing the requirements for this concentration, students will incorporate courses that offer new perspectives on the complex dynamics of social inequity, exclusion, and difference, and
which encourage engagement with the community – both by enrolling in classes designated as Diverse Perspectives in Liberal Learning (DPLL) and through non-DPLL classes that explore similar themes. Research opportunities, through summer fieldwork, internships, museum experience, or independent study projects, are strongly encouraged. Within this concentration, the three tracks are:

- **Archaeology and the Ancient World**: the most flexible of the concentration tracks, allowing students to explore any region or time period, and to develop their own areas of focus, such as museum studies, ethics and politics of the past, engineering and materials analysis, cultural heritage, or environmental studies.

- **Classical Archaeology**: for those interested chiefly in the ‘classic’ civilizations of the Mediterranean (especially Greece and Rome), as well as for those interested in both earlier (prehistoric) and later (medieval) periods in that geographic region.

- **Egyptian and Near Eastern Archaeology**: for those interested chiefly in the cultures of Egypt and the ancient ‘Near East’ – Anatolia, the Levant, Mesopotamia – from prehistoric through Islamic times.

### Required Courses:
The student must take a total of 10 courses, including:

**CORE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 0100</td>
<td>Field Archaeology in the Ancient World</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 0500</td>
<td>Past Forward: Discovering Anthropological Archaeology</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 1900</td>
<td>The Archaeology of College Hill</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 0030</td>
<td>Art in Antiquity: An Introduction</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 0150</td>
<td>Introduction to Egyptian Archaeology and Art</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 0520</td>
<td>Roman Archaeology and Art</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 3620</td>
<td>Archaeology of the Greek Past</td>
<td>1</td>
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</tbody>
</table>

**TRACK REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Track</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Archaeology and the Ancient World</strong></td>
<td>ARCH 0315</td>
<td>Heritage In and Out of Context: Museum and Archaeological Heritage</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ARCH 1800</td>
<td>Contemporary Issues in Archaeological Theory</td>
<td>1</td>
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</tbody>
</table>

One ARCH course, of any level, that focuses on a particular thematic or theoretical topic pertaining to archaeology, for example:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
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</table>

One ARCH course, of any level, that focuses on a part of the world OTHER than Mediterranean, Egyptian, or Near Eastern, for example:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
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</thead>
</table>

Two additional ARCH courses, on any aspect of archaeology and art, at the 1000 level (or above). Students are encouraged to use these upper-level courses to define a particular core specialty or track, such as a focus on archaeological theory, museum studies, archaeological ethics, materials analysis, cultural heritage, or climate change, for example:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
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</table>

**Classical Archaeology:**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
</tr>
</thead>
</table>

Two non-ARCH courses which EITHER relate to the study of the ancient world OR to the discipline of archaeology. Outside courses are chosen with the approval of the Concentration Advisor from appropriate 1000 level (or above) offerings in other departments such as, but not limited to: Anthropology, Classics, Egyptology and Assyriology, Environmental Studies, Geological Sciences, History, History of Art and Architecture, Religious Studies. One term of language study, in any relevant (usually ancient) language, may also be counted toward this requirement.

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<tr>
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<th>Course Title</th>
<th>Placement</th>
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</table>

One course in either Ancient Greek or Latin, at a level beyond the first year of study, for example:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
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</thead>
</table>

Two courses in Mediterranean (prehistoric, Greek, Roman, medieval) archaeology and art, at the 1000 level (or above). Students are encouraged to choose two courses in the core geographical focus of the Joukowsky Institute (Classical/Mediterranean archaeology and Egyptian/Near Eastern archaeology).

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
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</table>

One ARCH course, of any level, that focuses on a part of the world OTHER than Mediterranean, Egyptian, or Near Eastern OR focuses on a particular thematic topic pertaining to archaeology, for example:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Placement</th>
</tr>
</thead>
</table>

One non-ARCH course which EITHER relates to the study of the ancient world OR to the discipline of archaeology. Outside courses are chosen with the approval of the Concentration Advisor from appropriate 1000 level (or above) offerings in other departments such as, but not limited to: Anthropology, Classics, Egyptology and Assyriology, Environmental Studies, Geological Sciences, History, History of Art and Architecture, Religious Studies. One term of language study, in any relevant (usually ancient) language, may also be counted toward this requirement.

| Course Code | Course Title | Placement |

Two courses in Egyptian and Near Eastern archaeology and art at the 1000 level (or above). Students are encouraged to choose two courses in the core geographical focus of the Joukowsky Institute (Classical/Mediterranean archaeology and Egyptian/Near Eastern archaeology). Students are encouraged to choose two courses in the core geographical focus of the Joukowsky Institute (Classical/Mediterranean archaeology and Egyptian/Near Eastern archaeology).

| Course Code | Course Title | Placement |

One ARCH course, of any level, that focuses on a part of the world OTHER than Mediterranean, Egyptian, or Near Eastern OR focuses on a particular thematic topic pertaining to archaeology, for example:

| Course Code | Course Title | Placement |

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Fieldwork, Study Abroad, and Capstone Experiences

Students are strongly encouraged to consider participating in a field project, most typically after sophomore or junior year. The Concentration Advisor and other faculty members can provide suggestions about how to explore and fund possible field projects. For each of the tracks, a capstone experience may be substituted for one of these required courses. With the permission of the Concentration Advisor, up to three successfully completed courses, from relevant and accredited study abroad programs, may be counted towards the concentration requirements. Field school courses that provide formal university transfer credit, and official transcripts, may also be used to fulfill concentration requirements.

Honors Concentrations

An Honors concentration in any of these tracks requires the successful completion of all the standard requirements with the addition of an Honors thesis. For the preparation of this thesis, students will ordinarily enroll in ARCH 1970 during the first semester of the senior year and ARCH 1990 during the second semester of the senior year (these courses may not be taken S/NC, nor may they be used to satisfy the standard requirements of the concentration). In order to qualify for honors, students must have received more A’s than B’s in concentration courses completed.

Honors concentrations are recommended for students considering graduate work in the discipline of archaeology. Any student interested in a course of graduate study should speak to the undergraduate concentration advisor as soon as possible, not least for advice about additional forms of preparation. Graduate work in the archaeology of the ancient world, for example, requires knowledge of appropriate ancient, as well as modern, languages. Students should start work on acquiring these skills as early as possible.

The Honors Thesis

The Honors thesis is an extended essay, usually of between 40 and 60 pages in length, researched and written under the supervision of a faculty advisor and second reader during the senior year (during which the student must be enrolled in ARCH 1970 in the Fall and ARCH 1990 in the Spring semester).

Where appropriate, the advisor or the reader, but not both of them, may be in a unit other than the Joukowsky Institute for Archaeology and the Ancient World. The specific topic and approach of the thesis are worked out between the student and the thesis advisor, with assistance from the student's second reader. This process should begin in the latter part of the student's junior year.

A preliminary title and one page outline of the proposed Honors thesis is due to the Concentration Advisor and the thesis advisor by May 15th of the junior year.

The deadlines for thesis drafts, and for final thesis submission, will be agreed between the student and the faculty advisors. The deadline for final thesis submission typically should be on or before April 15th, and must be no later than the first day of Reading Period in the final semester of senior year. Both a bound and an electronic version of the final thesis must be submitted to the Joukowsky Institute by May 1, via email to joukowsky_institute@brown.edu.

The completed thesis will be evaluated by the advisor and second reader, who will discuss its strengths and weaknesses in a joint meeting with the student; they will then make a recommendation concerning Honors, and also agree a grade for ARCH 1990.

The Honors concentrators will be asked to make a short public presentation about their work; this event will be organized by the Concentration Advisor, and usually occurs during or shortly after Reading Period.

Evaluation

The Director of Undergraduate Studies will review the student’s overall record, in addition to the thesis evaluations. If all requirements have been successfully met, the recommendation will be made that the student graduates with Honors.

Architecture

The Architecture concentration allows students to develop a broad understanding of the concepts and methods for the planning and design of buildings, landscapes, and cities. The concentration was planned with the explicit goal of connecting architectural training firmly with the humanities and providing a greater awareness of global, environmental, social and economic issues in the built environment. This approach to the education of architects and urban planners is meant to provide them with the tools needed in today’s urban global society. Students who complete the concentration will have the option of transitioning into a 2-year Masters of Architecture program at the Rhode Island School of Design or several other architecture schools.

Concentration Requirements

Two RISD double-credit Design Studios: Students will take the courses at the Rhode Island School of Design but will register at Brown.

HIAA 0001 Architectural Design
HIAA 0002 Advanced Design Studio

Six Core Requirements:

Select Four (4) Courses from RISD: Students will take the courses at the Rhode Island School of Design but will register at Brown.

HIAA 0003 Architectural Projection
HIAA 0004 Architectural Analysis
HIAA 0005 Structural Analysis
HIAA 0006 Wood Structures
HIAA 0007 Environmental Design II
Select Two (2) Courses from Brown:

HIAA 0010 A Global History of Art and Architecture
HIAA 0042 Islamic Art and Architecture
HIAA 0081 Architecture of the House Through Space and Time
HIAA 0770 Architecture and Urbanism of the African Diaspora
HIAA 0850 Modern Architecture or HIAA 0860 Contemporary Architecture
HIAA 1181 Prefabrication and Architecture

Six Additional Electives:

Two courses from History and Theory:

HIAA 0070 Introduction to American Art: The 19th Century

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Four additional electives from the following:

- ARCH 1900 The Archaeology of College Hill
- COLT 1810H Tales of Two Cities: Havana - Miami, San Juan - New York
- ECON 1420 Urbanization in China
- ENGL 1760K Reading New York
- ENV 0110 Sustainable Design in the Built Environment
- ENV 0410 Environmental Stewardship
- TAPS 1200 Stage Lighting
- TAPS 1280F Introduction to Set Design
- TAPS 1280G Advanced Set Design
- TAPS 1300 The City: An Introduction to Urban Studies
- TAPS 1701Q Leading Social Ventures - Social Entrepreneurship in Action
- TAPS 1870C The Environment Built: Urban Environmental History and Urban Environmentalism for the 21st Century
- VISA 0100 Studio Foundation
- VISA 1210K Digital Printmaking
- VISA 1420 Sculpture II: Conceptual Propositions

Honors

For students in the concentration who intend to go to architecture school afterwards, typically their design project in their double credit second RISD studio will be ideal for a capstone or honors project. For others, who might tend towards theory or history of architecture, an honors thesis is still a valid option.

Astronomy

Along with Greek, Latin, and Mathematics, Astronomy counts as one of the oldest continuously taught subjects in the Brown curriculum. It is the study of the properties of stars, galaxies, and the Universe, and as such combines elements from the disciplines of both Physics and Planetary Geology. Students pursuing this concentration complete introductory coursework in classical mechanics, relativity, and astrophysics, along with mathematics and electromagnetism. They go on to complete courses in stellar and extragalactic astrophysics as well as cosmology. Facilities available to concentrators include the historic Ladd Observatory.

Standard concentration for the A.B. degree

Eleven or twelve courses are required (depending on the satisfaction of prerequisites).

Prerequisites

- PHYS 0070 Analytical Mechanics
- PHYS 0160 Introduction to Relativity and Quantum Mechanics
- PHYS 0270 Introduction to Astronomy

Select one of the following Series:

1. MATH 0170 & MATH 0180 Advanced Placement Calculus
   & Intermediate Calculus
2. MATH 0190 & MATH 0200 Advanced Placement Calculus (Physics/
   Engineering) and Intermediate Calculus (Physics/
   Engineering)
3. MATH 0350 Honors Calculus (or equivalent)
4. PHYS 0470 Electricity and Magnetism

Program

Select one of the following mathematics courses:

- MATH 0520 Honors Linear Algebra
- MATH 0540 Linear Algebra
- PHYS 0720 Methods of Mathematical Physics
- APMA 0330 Methods of Applied Mathematics I, II
- APMA 0340 Methods of Applied Mathematics I, II

Select two of the following astrophysics courses:

- PHYS 1100 Introduction to General Relativity
- PHYS 1250 Stellar Structure and the Interstellar Medium
- PHYS 1270 Extragalactic Astronomy and High-Energy Astrophysics
- PHYS 1280 Introduction to Cosmology

Three additional 1000- or 2000-level courses in physics or a related field, suggestions:

- APMA 1670 Statistical Analysis of Time Series
- ENGR 1860 Advanced Fluid Mechanics
- GEOL 0810 Planetary Geology
- GEOL 1810 Physics of Planetary Evolution
- MATH 1060 Differential Geometry
- PHYS 0500 Advanced Classical Mechanics
- PHYS 0560 Experiments in Modern Physics
- PHYS 1410 Quantum Mechanics A
- PHYS 1510 Advanced Electromagnetic Theory
- PHYS 1530 Thermodynamics and Statistical Mechanics
- PHYS 1560 Modern Physics Laboratory

Total Credits: 14

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Biochemistry & Molecular Biology

How does life work at the molecular level? This question is at the core of the concentration program Biochemistry and Molecular Biology. In earlier years of this discipline, the focus was on structure and function of proteins, nucleic acids, lipids, carbohydrates and small molecules such as vitamins. Today the logical approach and tools of biochemical science are being expanded to new areas in neuroscience, developmental biology, immunology, pharmacology and synthetic biology (the design of analogs of biological systems). Training in biochemistry begins with a foundation in mathematics, physics, chemistry and biology. Some courses offered in other departments, including engineering, geology and computer science, are also useful. A key component of this program is the year of hands-on research carried out in collaboration with a faculty member here at Brown. Faculty sponsors are drawn from both the Chemistry Department and the Division of Biology and Medicine, and include basic science and clinical faculty.

Standard program for the Sc.B. degree

Students must take twenty courses in biology, chemistry, mathematics, and physics, including the following core requirements, some of these may be fulfilled with AP credits. Students are expected to take courses that will count toward the concentration ABC/NC. Students should discuss the S/NC option with their concentration advisor if circumstances warrant consideration. Students should not register S/NC for a concentration course without advisor pre-approval.

Three courses in mathematics, statistics and/or computer science, typically including MATH 0090, MATH 0100, or equivalent)  
Two courses in physics, typically:  
- PHYS 0030 Basic Physics  
- PHYS 0050 Foundations of Mechanics  
- ENGN 0030 Introduction to Engineering  
Three courses in physical and organic chemistry:  
- CHEM 0330 Equilibrium, Rate, and Structure  
- CHEM 0350/0360 Organic Chemistry  
One course in biophysical or related chemistry:  
- CHEM 0400 Biophysical and Bioinorganic Chemistry  
- CHEM 0500 Inorganic Chemistry  
- CHEM 1660 Instrumental Analysis with Environmental Applications  
Three courses in biochemistry:  
- BIOL 0280 Introductory Biochemistry  
- BIOL 1270 Advanced Biochemistry  
- CHEM 1230 Chemical Biology  
Select two semester courses of independent research approved by a concentration advisor:  
- BIOL 1950/1960 Directed Research/Independent Study  
- CHEM 0970/0980 Undergraduate Research

Suggested Elective Courses:

- BIOL 0800 Principles of Immunology  
- BIOL 0900 Principles of Physiology  
- BIOL 1050 Biology of the Eukaryotic Cell  
- BIOL 1090 Polymer Science for Biomaterials  
- BIOL 1100 Cell Physiology and Biophysics  
- BIOL 1110 Topics in Signal Transduction  
- BIOL 1200 Protein Biophysics and Structure  
- BIOL 1260 Physiological Pharmacology  
- BIOL 1290 Cancer Biology  
- BIOL 1310 Developmental Biology  
- BIOL 1330 Biology of Reproduction  
- BIOL 1520 Innate Immunity  
- BIOL 1540 Molecular Genetics  
- BIOL 1560 Virology  
- BIOL 1600 Development of Vaccines to Infectious Diseases  
- BIOL 2110 Drug and Gene Delivery  

Neuroscience Electives:  
- NEUR 0010 The Brain: An Introduction to Neuroscience  
- NEUR 0650 Biology of Hearing  
- NEUR 1020 Principles of Neurobiology  
- NEUR 1040 Introduction to Neurogenetics  
- NEUR 1670 Neuropharmacology and Synaptic Transmission  

Chemistry Electives:  
- CHEM 0500 Inorganic Chemistry  
- CHEM 1140 Physical Chemistry: Quantum Chemistry  
- CHEM 1150 Physical Chemistry: Statistical Mechanics  
- CHEM 1220 Computational Tools in Biochemistry and Chemical Biology  
- CHEM 1230 Chemical Biology  
- CHEM 1240 Biochemistry  
- CHEM 1450 Advanced Organic Chemistry  

Computer Science Electives:  
- CSCI 1810 Computational Molecular Biology  

Quantitative Science or Mathematics Electives:  
Select two electives from any quantitative science or mathematics course relevant to biochemistry (including courses on the preceding list) and approved by a concentration advisor.

Total Credits: 20

1. Note that the mathematics and physics requirements may be satisfied by Advanced Placement credit.
2. or any NEUR course in Cell, Genetics, Molecular Biology, or Development.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Honors Requirements for Biochemistry

All ScB Biochemistry concentrators are candidates for Honors; no separate application is necessary.

The requirements for Honors in Biochemistry are:

* A strong grade record in concentration courses. This means a grade point average for the concentration that is higher than 3.25.
* Two semesters of Independent Study (CHEM 0970, CHEM 0980 or equivalent). Guidelines and requirements associated with Independent Study are in the Undergraduate Concentration Handbook which can be found at the department website (http://www.brown.edu/academics/chemistry/undergraduate).
* A Thesis in a form approved by the research advisor, and recommended by the research advisor. Additional information about thesis guidelines will be provided by the Concentration Advisor in the first half of the fall semester.

Biology

The Biology concentration invites students to study, in depth and in breadth, the science of life and living matter. Whether pursuing the Bachelor of Arts (A.B.) or Science (Sc.B.) in biology, students can expect to learn broadly in the discipline through a selection of courses in three areas: cell and molecular biology, structure and function, and organismal biology. In addition, students pursuing the Sc.B. complete a thematic track through which they gain an in-depth understanding of a particular subfield (such as, Immunopathology; Ecology and Evolutionary Biology; Physiology/Biotechnology; Cell and Molecular Biology; Physical Sciences. The concentration also emphasizes practical skills and experimental design. Concentrators are required to take at least 3 courses with a laboratory or fieldwork component. Within all of these requirements, students have a high degree of flexibility and choice. Broad research opportunities are also available across several departments within the basic sciences as well.

Standard program for the A.B. Biology

The concentration program for the A.B. in Biology consists of four prerequisite courses in math, chemistry, and a statistics course as well as ten courses in biological sciences, including at least one course in each of the following three areas: Area 1: Cell/Molecular Biology, Area 2: Structure/Function, and Area 3: Organismal Biology.

Prerequisites:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I (or placement. MATH 0050/MATH 0060 may be substituted for MATH 0090.)</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II (or placement)</td>
</tr>
<tr>
<td>MATH 0170</td>
<td>Advanced Placement Calculus (or equivalent placement)</td>
</tr>
</tbody>
</table>

Or a statistics course, to be approved by the concentration advisor.

Ten Core Courses:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems (Required course; AP credit or similar IB or A-levels accepted, placement test available.)</td>
</tr>
</tbody>
</table>

The Area requirement must be fulfilled by taking at least one course in each of these groups:  

Area 1 (Cell/Molecular Biology)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0280</td>
<td>Introductory Biochemistry</td>
</tr>
<tr>
<td>BIOL 0470</td>
<td>Genetics</td>
</tr>
<tr>
<td>BIOL 0500</td>
<td>Cell and Molecular Biology</td>
</tr>
<tr>
<td>BIOL 0510</td>
<td>Introductory Microbiology</td>
</tr>
</tbody>
</table>

Area 2 (Structure/Function)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0400</td>
<td>Biological Design: Structural Architecture of Organisms</td>
</tr>
<tr>
<td>BIOL 0410</td>
<td>Invertebrate Zoology</td>
</tr>
<tr>
<td>BIOL 0440</td>
<td>Inquiry in Plant Biology: Analysis of Plant Growth, Reproduction and Adaptive Responses</td>
</tr>
<tr>
<td>BIOL 0800</td>
<td>Principles of Physiology</td>
</tr>
<tr>
<td>BIOL 1120</td>
<td>Biomaterials</td>
</tr>
<tr>
<td>BIOL 1310</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>BIOL 1330</td>
<td>Biology of Reproduction</td>
</tr>
<tr>
<td>BIOL 1880</td>
<td>Comparative Biology of the Vertebrates</td>
</tr>
<tr>
<td>NEUR 0010</td>
<td>The Brain: An Introduction to Neuroscience</td>
</tr>
</tbody>
</table>

Area 3 (Organismal Biology)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0140K</td>
<td>Conservation Medicine</td>
</tr>
<tr>
<td>BIOL 0210</td>
<td>Diversity of Life</td>
</tr>
<tr>
<td>BIOL 0350</td>
<td>The Fossil Record: Life through Time on Earth</td>
</tr>
<tr>
<td>BIOL 0380</td>
<td>The Ecology and Evolution of Infectious Disease</td>
</tr>
<tr>
<td>BIOL 0410</td>
<td>Invertebrate Zoology</td>
</tr>
<tr>
<td>BIOL 0415</td>
<td>Microbes in the Environment</td>
</tr>
<tr>
<td>BIOL 0420</td>
<td>Principles of Ecology</td>
</tr>
<tr>
<td>BIOL 0430</td>
<td>The Evolution of Plant Diversity</td>
</tr>
<tr>
<td>BIOL 0480</td>
<td>Evolutionary Biology</td>
</tr>
<tr>
<td>BIOL 1880</td>
<td>Comparative Biology of the Vertebrates</td>
</tr>
<tr>
<td>ENVS 0490</td>
<td>Environmental Science in a Changing World</td>
</tr>
</tbody>
</table>

Six additional courses chosen from BIOL and/or NEUR offerings for concentrators. At least two at the advanced (1000-2000) level. The Core may include up to two related sciences, with advisor approval.

Total Credits 10

1. AP scores of 4 or above may substitute Math courses.
2. At least two biology and/or neuroscience courses must be at the advanced level (between 1000-2999). EXCLUSIONS: BIOL 0920 series courses, BIOL 1070, & BIOL 1920 series courses. *Courses numbered below BIOL 0100 do not carry concentration credit. At least three of the Biology and/or Neuroscience courses must include laboratory or fieldwork. BIOL 1950/BIOL 1960, (Directed Research) may be included, but is not required. If a lab project, this can count for ONE of the three lab course requirements, and one advanced course.
3. No substitutions per above Area list. If a course is listed in more than one area, it may be used to fulfill one of those, the other must be fulfilled by a different course.
4. Biology courses for concentration credit include those numbered greater than 0100 with some exceptions noted within the course descriptions. Courses numbered over 3000 do not count towards Undergraduate requirements either quantity or for concentration.

Honors: Honors in biology requires a thesis and presentation based on a research project (conducted via BIOL 1950/BIOL 1960), and quality grades in the concentration. Guidelines and information on faculty research are available in the Office of Biology Undergraduate Education or found at http://www.brown.edu/academics/biology/undergraduate-education/.
### Standard Program for the Sc.B. Biology

The concentration program for the Sc.B. in Biology consists of seven prerequisite courses in math, chemistry, and physics as well as thirteen to fourteen courses in biological sciences, including courses in each of the following three areas: Area 1: Cell/Molecular Biology, Area 2: Structure/Function, and Area 3: Organismal Biology, and the three-course Track. The biological sciences requirement also requires research (BIOL 1950/BIOL 1960), which should reflect the advanced cluster.

Students pursuing a ScB in Biology have the option to substitute a course for CHEM 0360 (Organic Chemistry) in their background core. For students pursuing the Marine Biology track, an upper level course in Geological Sciences may replace CHEM 0360. For students pursuing all other tracks, BIOL 0280 (Introductory Biochemistry) may serve as the replacement course. Please note that approval from the concentration advisor is required for these background course substitutions. If the student has already declared, then a revised concentration plan must be submitted and approved via the ASK system. If BIOL 0280 is used as a substitute for CHEM 0360, it cannot be counted as a core course, as a laboratory course, or as an Area 1 course. Students planning to apply to medical or graduate school should seek additional advising (such as from the Health Careers Office) in crafting their course plan.

#### Prerequisites:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I (or placement)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or IB credit)</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>or BIOL 0280</td>
<td>Introductory Biochemistry</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0030</td>
<td>Basic Physics (or equivalent. PHYS 0050 or ENGN 0030 may be substituted for PHYS 0030.)</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0040</td>
<td>Basic Physics (or equivalent. PHYS 0060 or ENGN 0040 may be substituted for PHYS 0040.)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Core Courses:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems (or placement)</td>
<td>1</td>
</tr>
</tbody>
</table>

The Area requirement must be fulfilled by taking at least one course in each of these groups:

#### Area 1 (Cell/Molecular Biology)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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<td>Introductory Biochemistry</td>
<td>1</td>
</tr>
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<td>1</td>
</tr>
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</tr>
<tr>
<td>BIOL 0510</td>
<td>Introductory Microbiology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0530</td>
<td>Principles of Immunology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1050</td>
<td>Biology of the Eukaryotic Cell</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1310</td>
<td>Developmental Biology</td>
<td>1</td>
</tr>
<tr>
<td>NEUR 1020</td>
<td>Principles of Neurobiology</td>
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</table>

#### Area 2 (Structure/Function)

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<td>Invertebrate Zoology</td>
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<tr>
<td>BIOL 0440</td>
<td>Inquiry in Plant Biology: Analysis of Plant Growth, Reproduction and Adaptive Responses</td>
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<td>BIOL 0800</td>
<td>Principles of Physiology</td>
<td>1</td>
</tr>
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<td>BIOL 1120</td>
<td>Biomaterials</td>
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<td>BIOL 1310</td>
<td>Developmental Biology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1330</td>
<td>Biology of Reproduction</td>
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</tr>
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</table>

#### Area 3 (Organismal Biology)

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>BIOL 0140K</td>
<td>Conservation Medicine</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0210</td>
<td>Diversity of Life</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0350</td>
<td>The Fossil Record: Life through Time on Earth</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0370 - Experimental Evolution</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BIOL 0410</td>
<td>Invertebrate Zoology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0415</td>
<td>Microbes in the Environment</td>
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</tr>
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<td>BIOL 0420</td>
<td>Principles of Ecology</td>
<td>1</td>
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<td>BIOL 0430</td>
<td>The Evolution of Plant Diversity</td>
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<td>1</td>
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<td>BIOL 1880</td>
<td>Comparative Biology of the Vertebrates</td>
<td>1</td>
</tr>
<tr>
<td>ENVS 0490</td>
<td>Environmental Science in a Changing World</td>
<td>1</td>
</tr>
</tbody>
</table>

Five additional courses chosen from BIOL and/or NEUR offerings for concentrations. Alternatively, students may include up to two related (non-BIOL/NEUR) sciences suitable for science concentrators.  

#### RESEARCH:

Typically, two courses in Track is advanced level research (BIOL 1950, 1960).  

#### TRACK:

The Track consists of three additional biological sciences courses (not including BIOL 1950/1960 research) that form a Track. Tracks include: Immuno/Pathobiology; Ecology and Evolutionary Biology; Physiology and Biotechnology; Neurobiology; Physical Sciences; Marine Biology; Cell and Molecular Biology.  

#### Total Credits: 13-14

1. AP scores of 4 or 5 may substitute Math courses.  
2. At least two biology and/or neuroscience courses numbered at the 1000 or 2000 level. EXCLUSIONS: BIOL 0920 series courses, BIOL 1070, or BIOL 1920 series courses. *Courses numbered below BIOL 0100 do not carry concentration credit. At least three of the biology and/or neuroscience courses must include laboratory or fieldwork. No substitutions per above Area lists. If a course is listed in more than one area, it may be used to fulfill one of those; the other must be fulfilled by a different course*  
3. Biology courses for concentration credit include those numbered greater than D100 with some exceptions noted within the course descriptions. Courses numbered over 3000 do not count towards Undergraduate requirements either quantity or for concentration.  
5. If substantial research is carried out away from Brown, it must be approved by an appropriate Brown BioMed faculty member but does not carry course credit toward the Core program.  
6. At least two, and preferably all three, must be above 1000-level. Courses used for the cluster, must be approved by an advisor and/or Associate Dean of Biology, Katherine Smith.  

**Honors:** Honors in biology requires a thesis and presentation based on a research project (usually conducted via BIOL 1950/BIOL 1960), and quality grades in the concentration. Guidelines and information on faculty research are available in the Office of Biology Undergraduate Education or at http://www.brown.edu/academics/biology/undergraduate-education/.

#### Stipulations for Biology Programs:

1. For double concentrations, no more than two courses may overlap (i.e., be used to meet requirements of both) programs, prerequisites excepted.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
2. No more than two semesters of directed research may be used as concentration credits. Each does count as an individual core towards the program, but only carry one lab credit towards the three required.

3. A limited number of transfer or study abroad courses may be used within the program, subject to approval of advisor, and Associate Dean of Biology, Katherine Smith.

## Biomedical Engineering

The Sc.B. program in Biomedical Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/. It is jointly offered by the School of Engineering and the Division of Biology and Medicine as an interdisciplinary concentration designed for students interested in applying the methods and tools of engineering to the subject matter of biology and the life sciences. The education objectives of the Biomedical Engineering program are to prepare graduates: (1) to be employed in careers of useful service to society, including scientific and technical areas within medicine, industry, and health care delivery; (2) to demonstrate the ability to apply the basic principles of engineering and science, as well as problem solving skills and critical thinking, to a broad spectrum of biomedical engineering problems; (3) to demonstrate their ability to work in teams, and to effectively communicate and understand the broad social, ethical, economic and environmental consequences of their lifelong education. The student outcomes of this program are the (a) - (k) Student Outcomes as defined by the "ABET Criteria for Accrediting Engineering Programs (available online at http://www.abet.org/ accreditation-criteria-policies-documents/)." The Biomedical Engineering concentration shares much of the core with the other engineering programs, but is structured to include more courses in biology and chemistry, and a somewhat different emphasis in mathematics.

The requirements regarding Mathematics, Advanced Placement, Transfer Credit, Substitutions for Required Courses, and Humanities and Social Science Courses are identical to those of the Sc.B. degree programs in Engineering. Please refer to the Engineering section of the University Bulletin for explicit guidelines.

The Biomedical Engineering concentration shares much of the core with the other engineering programs, but is structured to include more courses in biology and chemistry, and a somewhat different emphasis in mathematics.

### Standard program for the Sc.B. degree

1. Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Dynamics and Vibrations</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0720</td>
<td>Thermodynamics</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0810</td>
<td>Fluid Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems</td>
<td>1</td>
</tr>
<tr>
<td>NEUR 0010</td>
<td>The Brain: An Introduction to Neuroscience</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0800</td>
<td>Principles of Physiology</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1910</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td>2</td>
</tr>
<tr>
<td>MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0180</td>
<td>Intermediate Calculus</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0350</td>
<td>Honors Calculus</td>
<td>1</td>
</tr>
<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
<td>1</td>
</tr>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 1650</td>
<td>Statistical Inference</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Upper Level Biomedical Engineering Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1110</td>
<td>Transport and Biotransport Processes</td>
<td>1</td>
</tr>
</tbody>
</table>

### Biophysics

Biophysics is that it is a quantitative science that requires a significant level of competence in physics, chemistry, mathematics, and biology. These areas therefore form the required background coursework for this program, and serve as a springboard to an advanced focus, developed in consultation with a concentration advisor. Advanced foci may include structure-function relations of macromolecules, biomechanics of cell cytoskeleton, biotechnology for drug and gene delivery, molecular mechanisms of membrane transport, sensory signal transduction, for examples. The program also requires a capstone research project that reflects this focus and may be drawn from collaborative research opportunities offered by faculty in biology, chemistry, or physics departments.

Additional detailed information about the field of Biophysics may be found at: http://www.biophysics.org/AboutUs/Biophysics/tabid/517/Default.aspx.

### Standard program for the Sc.B. degree

**Requirements**

Select one of the following Series:

- PHYS 0050 & PHYS 0060: Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics
- PHYS 0070 & PHYS 0160: Analytical Mechanics and Introduction to Relativity and Quantum Physics
- PHYS 0470: Electricity and Magnetism
- CHEM 0330: Equilibrium, Rate, and Structure
- CHEM 0350: Organic Chemistry

### Notes

* In addition to program requirements above, students must take four courses in the humanities and social sciences.
CHEM 0360 Organic Chemistry 1
Select one of the following: 1
CHEM 0400 Biophysical and Bioinorganic Chemistry
CHEM 1140 Physical Chemistry: Quantum Chemistry
PHYS 1530 Thermodynamics and Statistical Mechanics
PHYS 1610 Biological Physics
MATH 0100 Introductory Calculus, Part II (or equivalent) 1
MATH 0180 Intermediate Calculus (or equivalent) 1
Biol 0200 The Foundation of Living Systems 1
Select two additional biology courses chosen with approval of the advisor. Examples include courses in:

<table>
<thead>
<tr>
<th>Biology</th>
<th>Cell Biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0500 Cell and Molecular Biology</td>
<td>BIOL 1260 Physiological Pharmacology</td>
</tr>
<tr>
<td>BIOL 1050 Biology of the Eukaryotic Cell</td>
<td></td>
</tr>
<tr>
<td>BIOL 1200 Protein Biophysics and Structure</td>
<td></td>
</tr>
</tbody>
</table>

**Physiology**

| BIOL 0800 Principles of Physiology |
| BIOL 1100 Cell Physiology and Biophysics |
| BIOL 1190 Synaptic Transmission and Plasticity |
| NEUR 1020 Principles of Neurobiology |

**Pharmacology**

| BIOL 1260 Physiological Pharmacology |
| BIOL 1090 Polymer Science for Biomaterials |
| BIOL 1120 Biomaterials |
| BIOL 1140 Tissue Engineering |

Select six additional intermediate or advanced level courses, chosen from biology (e.g., biochemistry, genetics, physiology, physics, chemistry, and/or computer sciences and mathematics). Examples include:

<table>
<thead>
<tr>
<th>Biology</th>
<th>Applied Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0280 Introductory Biochemistry</td>
<td>APMA 0330 Methods of Applied Mathematics I, II</td>
</tr>
<tr>
<td>BIOL 0470 Genetics</td>
<td>APMA 0340 Methods of Applied Mathematics I, II</td>
</tr>
<tr>
<td>BIOL 0800 Principles of Physiology</td>
<td>APMA 0350 Applied Ordinary Differential Equations</td>
</tr>
<tr>
<td>BIOL 1190 Synaptic Transmission and Plasticity</td>
<td>APMA 0360 Applied Partial Differential Equations</td>
</tr>
</tbody>
</table>

**Chemistry**

| CHEM 1230 Chemical Biology |
| CHEM 1450 Advanced Organic Chemistry |

Select at least one semester (two are recommended) of Directed Research

<table>
<thead>
<tr>
<th>Biology</th>
<th>Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1950/1960 Directed Research/Independent Study</td>
<td>CHEM 0970/0980 Undergraduate Research</td>
</tr>
</tbody>
</table>

**Physics**

<table>
<thead>
<tr>
<th>PHYS 1990 Senior Conference Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credits 19</td>
</tr>
</tbody>
</table>

**Business, Entrepreneurship and Organizations**

Business, Entrepreneurship and Organizations (BEO) is a multidisciplinary concentration that provides a rigorous and synergistic program in the study of commercial activity grounded in economics, sociology and engineering. BEO focuses on the formation, growth, and organization of new ventures, innovation in commercial applications, financial markets and the marketplace, and management and organizational theory. Concentrators seek to understand the basic principles, approaches and vocabulary relevant to the study of entrepreneurship from the disciplines of economics, organizational sociology and engineering. Building on this multidisciplinary base, students develop specialized expertise in one of the three disciplinary approaches, with special emphasis on critical reasoning and quantitative research methods. In senior year capstone projects, students apply and integrate multidisciplinary learning by working in groups on real world projects, including the creation of new ventures. BEO students interested in the theory and practice of addressing social challenges might consider the Engaged Scholars Program (https://www.brown.edu/academics/college/special-programs/public-service/engaged-scholars-program/engaged-scholars-program).

The three tracks of the concentration are as follows:

1. **Business Economics**
2. **Organizational Studies**
3. **Entrepreneurship and Technology Management**

Upon completion of all concentration requirements, students receive the Bachelor of Arts (A.B.) degree in Business, Entrepreneurship and Organizations.

**The Curriculum**

**Business Economics Track**

**Foundation Requirements (foundation requirements must be completed before taking the capstone in fall of senior year)**

| ECON 0110 Principles of Economics |
| ECON 1110 Intermediate Microeconomics |
| SOC 1311 Micro-Organizational Theory: Social Behavior in Organizations |
| SOC 1315 Macro-Organizational Theory: Organizations in Social Context |
| ENGN 0020 Transforming Society-Technology and Choices for the Future |
| or ENGN 0030 Introduction to Engineering |
| ENGN 1010 The Entrepreneurial Process: Innovation in Practice |

**Math and Statistics Requirements**

| MATH 0090 Introductory Calculus, Part I |
| ECON 1620 Introduction to Econometrics |

**Track Requirements**

| ECON 0710 Financial Accounting |
| ECON 1210 Intermediate Macroeconomics |
| ECON 1710 Investments I |
| ECON 1720 Corporate Finance |

One Data Methods-intensive course from the following list:

| ECON 1301 Economics of Education I |
| ECON 1305 Economics of Education: Research |
| ECON 1310 Labor Economics |

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1355</td>
<td>Environmental Issues in Development Economics</td>
</tr>
<tr>
<td>ECON 1360</td>
<td>Health Economics</td>
</tr>
<tr>
<td>ECON 1375</td>
<td>Inequality of Opportunity in the US</td>
</tr>
<tr>
<td>ECON 1400</td>
<td>The Economics of Mass Media</td>
</tr>
<tr>
<td>ECON 1420</td>
<td>Urbanization in China</td>
</tr>
<tr>
<td>ECON 1480</td>
<td>Public Economics</td>
</tr>
<tr>
<td>ECON 1510</td>
<td>Economic Development</td>
</tr>
<tr>
<td>ECON 1520</td>
<td>The Economic Analysis of Institutions</td>
</tr>
<tr>
<td>ECON 1530</td>
<td>Health, Hunger and the Household in Developing Countries</td>
</tr>
<tr>
<td>ECON 1629</td>
<td>Applied Research Methods for Economists</td>
</tr>
<tr>
<td>ECON 1640</td>
<td>Econometrics II</td>
</tr>
<tr>
<td>ECON 1650</td>
<td>Financial Econometrics</td>
</tr>
<tr>
<td>ECON 1660</td>
<td>Big Data</td>
</tr>
<tr>
<td>ECON 1759</td>
<td>Data, Statistics, Finance</td>
</tr>
<tr>
<td>ECON 1765</td>
<td>Finance, Regulation, and the Economy: Research</td>
</tr>
</tbody>
</table>

One 1000-level economics course, including a second data methods intensive course from the list above 1

Capstone: one-semester required (must be taken fall of senior year) 1

BEQ 1930C BEO Capstone I: Business Economics Track

Total Credits 15

1 Or an optional two-semester capstone from the BEO 1930 and 1940 series

**Organizational Studies Track**

**Foundation Requirements** (foundation requirements must be completed before taking the capstone in fall of senior year)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>ECON 1110</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>SOC 1311</td>
<td>Micro-Organizational Theory: Social Behavior in Organizations</td>
</tr>
<tr>
<td>SOC 1315</td>
<td>Macro-Organizational Theory: Organizations in Social Context</td>
</tr>
<tr>
<td>ENGN 0020</td>
<td>Transforming Society-Technology and Choices for the Future</td>
</tr>
<tr>
<td>or ENGN 0030</td>
<td>Introduction to Engineering</td>
</tr>
<tr>
<td>ENGN 1010</td>
<td>The Entrepreneurial Process: Innovation in Practice</td>
</tr>
</tbody>
</table>

**Math and Statistics Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
</tr>
<tr>
<td>SOC 1100</td>
<td>Introductory Statistics for Social Research</td>
</tr>
<tr>
<td>or APMA 0650</td>
<td>Essential Statistics</td>
</tr>
<tr>
<td>or ECON 1620</td>
<td>Introduction to Econometrics</td>
</tr>
</tbody>
</table>

**Track Requirements**

One Introduction to Research Methods course (selected from the following): 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1020</td>
<td>Methods of Social Research</td>
</tr>
<tr>
<td>SOC 1050</td>
<td>Methods of Research in Organizations</td>
</tr>
</tbody>
</table>

Two Organization-Relevant Electives (OREs) (the following are approved examples-please consult with the CAB/BEO website for current offerings): 2

- AMST 1610A American Advertising: History and Consequences
- ECON 1760 Financial Institutions
- EDUC 1020 The History of American Education
- EDUC 1040 Sociology of Education
- EDUC 1060 Politics and Public Education
- EDUC 1150 Education, the Economy and School Reform
- EDUC 1200 History of American School Reform
- EDUC 1650 Policy Implementation in Education
- EDUC 1730 American Higher Education in Historical Context
- ENGN 1930S Land Use and Built Environment: An Entrepreneurial View
- ETHN 1890C Business, Culture, and Globalization: An Ethnographic Perspective
- PHP 2400 The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health
- PLCY 1700R Urban Revitalization: Lessons from the Providence Plan
- PLCY 1701J Policy Implementation
- PLCY 1701K Governance in the Academy: A University at Work in the 21st Century
- PLCY 1701O Labor Market Policy
- PLCY 1701Q Leading Social Ventures - Social Entrepreneurship in Action
- PLCY 1800 Investigating Modes of Social Change
- PLCY 1910 Social Entrepreneurship
- PLCY 2150 Strategic Communication
- PLCY 2655 Regulation and Compliance
- POLS 1150 Prosperity: The Ethics and Economics of Wealth Creation
- POLS 1240 Politics, Markets and States in Developing Countries
- POLS 1820W Market Liberalism: Origins, Principles and Contemporary Applications
- SOC 1114 Law and Society
- SOC 1115 The Enlightened Entrepreneur: Changemakers, Inspired Protagonists and Unreasonable People
- SOC 1871C Sociology of the Legal Profession

One Advanced Organization Studies course (AOS) (the following are approved examples-please consult with the CAB/BEO website for current offerings):

AOS courses directly employ and extend the theories and perspectives introduced by the foundational Organizational Studies courses. They are either taught by core Organization Studies faculty or vetted on a regular basis by the Organization Studies track advisor, to ensure that they thoroughly incorporate Organization Studies perspectives and focus primarily on organizational processes and phenomena.

- CLPS 1730 Psychology in Business and Economics
- ECON 1790 Corporate Governance and Management
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLCY 1700V</td>
<td>Nonprofit Organizations</td>
</tr>
<tr>
<td>PLCY 1700Y</td>
<td>Crisis Management</td>
</tr>
<tr>
<td>PLCY 2020</td>
<td>Public Budgeting and Management</td>
</tr>
<tr>
<td>PLCY 2350</td>
<td>Thinking, Planning and Acting Strategically</td>
</tr>
<tr>
<td>PLCY 2550</td>
<td>Managing and Leading in Public Affairs</td>
</tr>
<tr>
<td>PLCY 2700</td>
<td>Advanced Organizational and Management Strategies</td>
</tr>
<tr>
<td>SOC 1060</td>
<td>Leadership in Organizations</td>
</tr>
<tr>
<td>SOC 1870A</td>
<td>Investing in Social Change</td>
</tr>
<tr>
<td>SOC 1870L</td>
<td>The Economic Foundations of Everyday Life</td>
</tr>
<tr>
<td>SOC 1871O</td>
<td>Law, Innovation and Entrepreneurship</td>
</tr>
<tr>
<td>SOC 1872B</td>
<td>Sociology of Money</td>
</tr>
<tr>
<td>SOC 1872H</td>
<td>Sociology of FIRE: Finance, Insurance, + Real Estate</td>
</tr>
<tr>
<td>SOC 1872T</td>
<td>Social Innovation and Disruption: The Case of Modern Turkey</td>
</tr>
</tbody>
</table>

One Advanced Research Methods course (ARM) (the following are approved examples-please consult with the CAB/BEO website for current offerings):  
- ANTH 1940 Ethnographic Research Methods  
- ECON 1390 Research Methods for Economists  
- ECON 1630 Econometrics I  
- EDUC 1100 Introduction to Qualitative Research Methods  
- EDUC 1160 Evaluating the Impact of Social Programs  
- PHP 1320 Survey Research in Health Care  
- PLCY 1200 Policy Analysis and Program Evaluation  
- PLCY 2035 Statistics II for Public Policy Analysis  
- PLCY 2040 Policy Analysis and Program Evaluation  
- PLCY 2050 Program Evaluation  
- SOC 1117 Focus Groups for Market and Social Research  
- SOC 1118 Context Research for Innovation  
- SOC 1120 Market and Social Surveys  
- SOC 1127 EPIC: Ethnographic Praxis in Industry  
- SOC 1260 Market Research in Public and Private Sectors  
- SOC 1340 Principles and Methods of Geographic Information Systems  

**Capstone: one-semester required (must be taken fall of senior year)**  
- BEO 1930A BEO Capstone I: Organizational Studies Track  

**Total Credits:** 14  
1. Or an optional two-semester capstone from the BEO 1930 and 1940 series

### Entrepreneurship and Technology Management Track

#### Foundation Requirements (foundation requirements must be completed before taking the capstone in fall of senior year)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>ECON 1110</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>SOC 1311</td>
<td>Micro-Organizational Theory: Social Behavior in Organizations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1315</td>
<td>Macro-Organizational Theory: Organizations in Social Context</td>
</tr>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
</tr>
<tr>
<td>ENGN 1010</td>
<td>The Entrepreneurial Process: Innovation in Practice</td>
</tr>
</tbody>
</table>

#### Math and Statistics Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/Engineering)</td>
</tr>
<tr>
<td>or APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
</tr>
<tr>
<td>SOC 1100</td>
<td>Introductory Statistics for Social Research</td>
</tr>
<tr>
<td>or APMA 0650</td>
<td>Essential Statistics</td>
</tr>
<tr>
<td>or ECON 1620</td>
<td>Introduction to Econometrics</td>
</tr>
</tbody>
</table>

**Track Requirements**

One gateway course in Engineering or another physical science  
- Five courses that develop expertise in a technical subfield 1, 2  
- Capstone: two-semesters required (must be taken in fall and spring of senior year)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEO 1930B</td>
<td>BEO Capstone I: Entrepreneurship and Technology Management Track</td>
</tr>
<tr>
<td>BEO 1940B</td>
<td>BEO Capstone II: Entrepreneurship and Technology Management Track</td>
</tr>
</tbody>
</table>

**Total Credits:** 16  
1. For specific gateway and subfield courses, refer to the BEO website.  

### Chemical Physics

Chemical Physics is an interdisciplinary field at the crossroads of chemistry and physics and is administered jointly by the two departments. The concentration provides students with a broad-based understanding in fundamental molecular sciences, as well as a background for graduate studies in physical chemistry, chemical physics, or molecular engineering. Concentrators are required to take twenty courses in chemistry, physics, and mathematics, although approved courses in applied mathematics, biology, computer science, geological sciences, or engineering may be substitutes. Chemical Physics concentrators are also advised to take at least six courses in the humanities and social sciences. Chemical Physics concentrators at all levels (first-year through seniors) are actively involved in research with faculty members in both departments.

#### Standard program for the Sc.B. degree

Twenty-one semester courses 1 in chemistry, physics, and mathematics, with a minimum of four semester courses in mathematics. The expectation is that courses required for a concentration in Chemical Physics will be taken for a letter grade. Core courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>CHEM 0500</td>
<td>Inorganic Chemistry</td>
</tr>
<tr>
<td>CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
</tr>
<tr>
<td>PHYS 0070</td>
<td>Analytical Mechanics</td>
</tr>
<tr>
<td>PHYS 0160</td>
<td>Introduction to Relativity and Quantum Physics</td>
</tr>
<tr>
<td>PHYS 0470</td>
<td>Electricity and Magnetism</td>
</tr>
</tbody>
</table>

Select one of the following laboratory courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1160</td>
<td>Physical Chemistry Laboratory</td>
</tr>
<tr>
<td>PHYS 0560</td>
<td>Experiments in Modern Physics</td>
</tr>
<tr>
<td>PHYS 1560</td>
<td>Modern Physics Laboratory</td>
</tr>
</tbody>
</table>

Select one course in statistical mechanics:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1150</td>
<td>Physical Chemistry; Thermodynamics and Statistical Mechanics</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>PHYS 1530</td>
<td>Thermodynamics and Statistical Mechanics</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/Engineering)</td>
</tr>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>CHEM 0970/0980</td>
<td>Undergraduate Research</td>
</tr>
<tr>
<td>PHYS 1990</td>
<td>Senior Conference Course</td>
</tr>
<tr>
<td>Total Credits</td>
<td>21</td>
</tr>
</tbody>
</table>

**Honors Requirements for Chemical Physics**

All ScB Chemical Physics concentrators who complete the following requirements are candidates for Honors; no separate application is necessary.

The requirements for Honors in Chemical Physics are:

* A strong grade record in concentration courses. This means a grade point average for the concentration that is higher than 3.50.
* Two semesters of Independent Study (CHEM 0970, CHEM 0980, PHYS 1990 or equivalent). Guidelines and requirements associated with Independent Study are in the Undergraduate Concentration Handbook which can be found at the department website (http://www.brown.edu/academics/chemistry/undergraduate).
* A Thesis in a form approved by the research advisor, and recommended by the research advisor. Additional information about thesis guidelines will be provided by the Concentration Advisor in the first half of the fall semester.
* A Poster presentation at the chemistry department’s spring undergraduate poster session.

**Chemistry**

The Chemistry concentration offers courses and research opportunities that range from fundamental studies involving the characterization and preparation of synthetic and naturally occurring molecules, to interdisciplinary studies at the interfaces of chemistry with biology, medicine, physics, engineering, and nanoscience. As early as their first year, undergraduates are able to work one-on-one or in small groups with faculty members on cutting edge research projects. The Sc.B. degree provides a thorough foundation for further graduate study or for entry-level technical positions in each area. Students seeking the Sc.B. may either pursue the standard Chemistry concentration or one of the two optional tracks: Chemical Biology or Materials Chemistry. Students may also pursue the A.B. degree in Chemistry, which provides a core education in the discipline.

**Standard program for the A.B. degree**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0500</td>
<td>Inorganic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1150</td>
<td>Physical Chemistry: Thermodynamics and Statistical Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1160</td>
<td>Physical Chemistry Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

**Two advanced science/math electives.**

**Total Credits** 9

1. Note that the physical chemistry courses (CHEM 1140, CHEM 1150, CHEM 1160) have mathematics and physics prerequisites.
2. At least one must be a chemistry course. BIOL 0280 is credited as an elective for the chemistry concentration.

**Standard program for the Sc.B. degree**

The Chemistry Department offers three tracks for the Sc.B. Chemistry Concentration – a Chemistry track, a Chemical Biology track and a Materials Chemistry track. These tracks are not separate concentrations – your degree will still be an Sc.B. in Chemistry. The Chemical Biology track is designed for students who have a strong interest in the interface of chemistry with biology. The Materials Chemistry track is designed for students who have a strong interest in the interface of chemistry with nanoscience and materials science. The expectation is that courses required for the concentration will be taken for a letter grade.

**Concentrating in Chemistry – Three tracks**

The required/recommended courses for the three tracks are given below.

**Chemistry Track:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0400</td>
<td>Biophysical and Bioinorganic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0970</td>
<td>Undergraduate Research</td>
<td>1</td>
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<tr>
<td>CHEM 0980</td>
<td>Undergraduate Research</td>
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<tr>
<td>CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
<td>1</td>
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<tr>
<td>CHEM 1150</td>
<td>Physical Chemistry: Thermodynamics and Statistical Mechanics</td>
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<tr>
<td>CHEM 1160</td>
<td>Physical Chemistry Laboratory</td>
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<tr>
<td>Two Physics courses</td>
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<tr>
<td>Seven electives (at least three must be in Chemistry)</td>
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**Total Credits** 19

**Chemical Biology Track:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
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<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0400</td>
<td>Biophysical and Bioinorganic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0970</td>
<td>Undergraduate Research</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0980</td>
<td>Undergraduate Research</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1230</td>
<td>Chemical Biology</td>
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<tr>
<td>CHEM 1240</td>
<td>Biochemistry</td>
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<td>BIOL 0280</td>
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<td>BIOL 0470</td>
<td>Genetics</td>
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<tr>
<td>BIOL 0500</td>
<td>Cell and Molecular Biology</td>
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<tr>
<td>BIOL 0510</td>
<td>Introductory Microbiology</td>
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<tr>
<td>BIOL 0530</td>
<td>Principles of Immunology</td>
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<tr>
<td>BIOL 0800</td>
<td>Principles of Physiology</td>
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<tr>
<td>NEUR 1020</td>
<td>Principles of Neurobiology</td>
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**Materials Chemistry Track:**

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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
CHEM 0350 Organic Chemistry 1
CHEM 0360 Organic Chemistry 1
CHEM 0500 Inorganic Chemistry 1
CHEM 0970 Undergraduate Research 1
CHEM 0980 Undergraduate Research 1
CHEM 1060 Advanced Inorganic Chemistry 2 1
CHEM 1140 Physical Chemistry: Quantum Chemistry 1
CHEM 1150 Physical Chemistry: Thermodynamics and Statistical Mechanics 1
CHEM 1700 Nanoscale Materials: Synthesis and Applications 1
MATH 0180 or equivalent 1 1
Two Physics courses 2 2
BIOL 1090 Polymer Science for Biomaterials 1
Five electives, at least two must be chemistry courses. 1 5

Total Credits 19

1 BIOL 0280 is credited as an elective for the chemistry concentration.
2 For students with a more Engineering bent, the following substitutions can be made - ENGN 0030/ENGN 0040 can be substituted for PHYS; ENGN 0410 can be substituted for CHEM 1060; ENGN 0720 for CHEM 1150.
3 NOTE: MATH 0180 has additional prerequisites.
4 NOTE: Many of the BIOL courses have BIOL 0200 as a prerequisite.

In each of these cases, CHEM 0970/CHEM 0980 should be carried out with a faculty member with an appointment in the Chemistry Department. Research with faculty advisors outside Chemistry may be allowed in some special cases. In this event, the student should a) prepare a proposal for the research to be carried out and b) identify a faculty member in the Chemistry Department who will serve as a second advisor and the second reader for the thesis.

Honors Requirements for Chemistry
All ScB Chemistry concentrators, and any AB concentrator who completes the following requirements, are candidates for Honors; no separate application is necessary.

The requirements for Honors in Chemistry are:

* A strong grade record in concentration courses. This means a grade point average for the concentration that is higher than 3.50.
* Two semesters of Independent Study (CHEM 0970, CHEM 0980 or equivalent. Guidelines and requirements associated with Independent Study are in the Undergraduate Concentration Handbook which can be found at the department website (http://www.brown.edu/academics/chemistry/undergraduate).
* A Thesis in a form approved by the research advisor, and recommended by the research advisor. Additional information about thesis guidelines will be provided by the Concentration Advisor in the first half of the fall semester.
* A Poster presentation at the chemistry department's spring undergraduate poster session.

Classics

Classics focuses on the languages, literature, history, and culture of Greco-Roman antiquity. It provides specialized training for students intending to enter graduate school, and a broad liberal education for those with more general interests. Students may choose to study Ancient Greek, Latin, Sanskrit, or Modern Greek and gain knowledge in literature, mythology, ancient history, philosophy, and religion. Students may either pursue the standard Classics concentration - the most popular choice - or they may pursue one of the several optional tracks: Greek, Latin, Greek and Latin, South Asian Classics, Sanskrit, Greek and Sanskrit, or Latin and Sanskrit. Concentrators are strongly encouraged to integrate their studies in various fields of Classics by writing a senior thesis, by participating in seminars, or by undertaking a senior capstone project.

All tracks except "Greek and Latin," "Greek and Sanskrit," and "Latin and Sanskrit" require the satisfactory completion of eight courses as described below. Programs are flexible and students are encouraged to discuss their plans with the concentration advisor. The introductory courses in Greek and Latin may not usually be counted toward a concentration, but those in Sanskrit may be counted in some of the tracks.

Classics

One course in Greek or Latin on the 1000-level or above. 1 1
Select one of the following series: 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS 1210</td>
<td>The History of Greece from Archaic Times to the Death of Alexander</td>
</tr>
<tr>
<td>CLAS 1220</td>
<td>The Fall of Empires and Rise of Kings: Greek History 776 to 323 BC</td>
</tr>
<tr>
<td>or HIST 1200B</td>
<td>The Fall of Empires and Rise of Kings: Greek History to 776 to 323 BCE</td>
</tr>
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OR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CLAS 1310</td>
<td>Roman History I: The Rise and Fall of an Imperial Republic</td>
</tr>
<tr>
<td>CLAS 1320</td>
<td>Roman History II: The Roman Empire and Its Impact</td>
</tr>
<tr>
<td>or HIST 1201B</td>
<td>Roman History II: The Empire</td>
</tr>
</tbody>
</table>

Five other courses in classics, including classical archaeology, Greek, Latin, Sanskrit, or related areas to be approved by the concentration advisor. 2

Total Credits 8

1 Options offered in 2017/2018 include, but are not limited to: GREK 1050G, GREK 1060, GREK 1080, GREK 1100, GREK 1100G, GREK 1110D, GREK 1140, GREK 1820, LATN 1015, LATN 1110E, LATN 1110G, LATN 1110L, LATN 1110Y, LATN 1120D, LATN 1150, LATN 1810, and with instructor permission for those who are very advanced in Greek or Latin: GREK 2100F, GREK 2150, and LATN 2120E.

Greek

Four Greek courses on the 1000-level or above, at least one of which is to be: 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GREK 1810</td>
<td>Early Greek Literature</td>
</tr>
<tr>
<td>or GREK 1820</td>
<td>Fifth Century Survey</td>
</tr>
<tr>
<td>CLAS 1210</td>
<td>The History of Greece from Archaic Times to the Death of Alexander</td>
</tr>
<tr>
<td>CLAS 1220</td>
<td>The Fall of Empires and Rise of Kings: Greek History 776 to 323 BC</td>
</tr>
<tr>
<td>or HIST 1200B</td>
<td>The Fall of Empires and Rise of Kings: Greek History to 776 to 323 BCE</td>
</tr>
</tbody>
</table>

Two additional courses in classics, including classical archaeology, Greek, Latin, or related areas to be approved by the concentration advisor. 2

Total Credits 8

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
<table>
<thead>
<tr>
<th>Latin</th>
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<tbody>
<tr>
<td>Four Latin courses on the 1000-level or above, at least one of which</td>
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<tr>
<td>is to be:</td>
</tr>
<tr>
<td><strong>LATN 1810</strong> or <strong>LATN 1820</strong> Survey of Republican Literature</td>
</tr>
<tr>
<td><strong>CLAS 1310</strong> Roman History I: The Rise and Fall of an Imperial Republic</td>
</tr>
<tr>
<td><strong>CLAS 1320</strong> Roman History II: The Roman Empire and Its Impact</td>
</tr>
<tr>
<td>or <strong>HIST 1201B</strong> Roman History II: The Empire</td>
</tr>
<tr>
<td>Two additional courses in classics, including classical archaeology,</td>
</tr>
<tr>
<td>Greek, Latin, or related areas to be approved by the concentration</td>
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<td>and with instructor permission for those who are very advanced in</td>
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<tr>
<td>Latin: LATN 2120E.</td>
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<tr>
<td>2 See options listed under Classics track.</td>
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<table>
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<th>Greek and Latin</th>
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<tr>
<td><strong>LATN 1810</strong> or <strong>LATN 1820</strong> Survey of Republican Literature</td>
</tr>
<tr>
<td><strong>CLAS 1210</strong> The History of Greece from Archaic Times to the</td>
</tr>
<tr>
<td>Death of Alexander</td>
</tr>
<tr>
<td><strong>CLAS 1220</strong> The Fall of Empires and Rise of Kings: Greek History</td>
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<tr>
<td>478 to 323 BC</td>
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<tr>
<td>or <strong>HIST 1200B</strong> The Fall of Empires and Rise of Kings: Greek</td>
</tr>
<tr>
<td>History to 478 to 323 BCE</td>
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<tr>
<td><strong>CLAS 1310</strong> Roman History I: The Rise and Fall of an Imperial</td>
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<tr>
<td>Republic</td>
</tr>
<tr>
<td><strong>CLAS 1320</strong> Roman History II: The Roman Empire and Its Impact</td>
</tr>
<tr>
<td>or <strong>HIST 1201B</strong> Roman History II: The Empire</td>
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<td>and with instructor permission for those who are very advanced in</td>
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<tr>
<td>Latin: LATN 2120E.</td>
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<td>GREK 1080, GREK 1100, GREK 1100G, GREK 1110D, GREK 1140, GREK 1820,</td>
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<tr>
<td>and with instructor permission for those who are very advanced in</td>
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<tr>
<td>Greek: GREK 2100F and GREK 2150.</td>
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<th>South Asian Classics</th>
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<td>Three of the Sanskrit Classics Courses in Translation</td>
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<tr>
<td>SANS 0300, SANS 0400, SANS 1020 and SANS 1100.</td>
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<tr>
<td>2 Options offered in 2017-2018 include: CLAS 0995 and CLAS 1140.</td>
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<th>Sanskrit</th>
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<td>Two Sanskrit courses at the 1000-level or above</td>
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<tr>
<td>or HIST 1200B The Fall of Empires and Rise of Kings: Greek History</td>
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<tr>
<td>478 to 323 BCE</td>
</tr>
<tr>
<td><strong>CLAS 1210</strong> The History of Greece from Archaic Times to the Death</td>
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<tr>
<td>of Alexander</td>
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<tr>
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<tr>
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<tr>
<td>Total Credits</td>
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<tr>
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<td>2 Options offered in 2017/2018 include: CLAS 0995 and CLAS 1140.</td>
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<th>Greek and Sanskrit</th>
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<td>Four Greek courses on the 1000-level or above, at least one of which</td>
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<tr>
<td><strong>GREK 1810</strong> Early Greek Literature</td>
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<th>Latin and Sanskrit</th>
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<td>Four Sanskrit courses at any level</td>
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<tr>
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<tr>
<td><strong>CLAS 1210</strong> The History of Greece from Archaic Times to the Death</td>
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<tr>
<td>of Alexander</td>
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<tr>
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<tr>
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Honors
Students may earn honors in the concentration by presenting a satisfactory thesis, for the preparation of which they will ordinarily enroll in the relevant 1990 courses; these courses may not be used to satisfy the standard requirements for a concentration. In order to qualify, the candidate for honors in the Department of Classics ordinarily will be entering his/her seventh semester of study and must have an “A” average (3.50 or higher on a 4.00 scale) in the concentration.

Cognitive Neuroscience
Cognitive neuroscience is the study of higher cognitive functions in humans and their underlying neural bases. It is an integrative area of study drawing primarily from cognitive science, psychology, neuroscience, and linguistics. There are two broad directions that can be taken in this concentration - one is behavioral/experimental and the other is computational/modeling. In both, the goal is to understand the nature of cognition from a neural perspective. The standard concentration for the Sc.B. degree requires courses on the foundations, systems level, and integrative aspects of cognitive neuroscience as well as laboratory and elective courses that fit within a particular theme or category such as general cognition, perception, language development or computational/modeling. Concentrators must also complete a senior seminar course or an independent research course. Students may also participate in the work of the Brown Institute for Brain Science, an interdisciplinary program that unites ninety faculty from eleven departments.

Standard Program for the AB degree
(Effective Class of 2019)
The A.B. concentration requires 12 courses. The Sc.B. concentration additionally requires 1 laboratory course and 4 approved science courses, totaling to a total of 17 required courses.

Common Core
The introductory course, “CLPS 0010 Mind, Brain, and Behavior,” surveys the broad territory of the scientific study of the mind, as uniquely represented by our department. The course maps the breadth of the science of the mind, focusing on fascinating questions, garnered insights, common commitments, and successful techniques and approaches. The course could be taken by students interested in the CLPS concentrations or as an introduction at the beginning of one’s college career or as an integration after having completed a number of specialized courses in a particular concentration.

Careers in Cognitive Neuroscience and related fields requires familiarity with statistics. Therefore, the Cognitive Neuroscience concentration requires a course in Quantitative Methods (CLPS 0900). CLPS 0900 is a prerequisite for most of the laboratory courses, so concentrators should plan to take this course by their fourth semester. The department does not grant concentration credit of AP Statistics, regardless of score. Students who feel that CLPS 0900 is too elementary can complete an approved alternative course (e.g., APMA 1650, CLPS 2306).

Foundation
To provide students with a solid foundation of knowledge in their area of concentration and to minimize redundancy, the Cognitive Neuroscience concentration requires four foundation courses in Neuroscience, Cognitive Neuroscience, Cognitive Neuropsychology, and Computational Methods.

Electives
Each concentrator will take four additional courses that allow the student to go into depth in some of the relevant topics. These electives must include at least two courses at the cognitive neuroscience systems level. The courses designed to count as electives will often have foundation courses as prerequisites and may include laboratory courses, content courses, or seminars.

Research Methods and Capstone
Another element in the Cognitive Neuroscience concentration is a research methods course that builds on the introductory statistics course (which will be a prerequisite) but exposes students to a variety of topics in research of the mind: to empirical methods (e.g., surveys, chronometry, eye tracking, brain imaging), to common designs (e.g., factorial experimental, correlational, longitudinal), to research ethics, and to best practices of literature review. Concentrators will additionally take either a seminar course or an independent research course to serve as their capstone experience.

Additional requirements for Sc.B.
In line with university expectations, the Sc.B. requirements include a greater number of courses and especially science courses. The definition of “science” is flexible. A good number of these courses will be outside of CLPS, but several CLPS courses might fit into a coherent package as well. In addition, the Sc.B. degree also requires a lab course to provide these students with in-depth exposure to research methods in a particular area of the science of the mind.

Honors Requirement
The Research Methods course will serve as a requirement for admission to the Honors program in Cognitive Science, Cognitive Neuroscience, and Psychology. Previously, any lab course served as this requirement. This practice not only demanded a large number of lab courses as part of the CLPS curriculum but also suffered from frequent mismatches between the type of research the student wished to pursue and the type of lab course available in the relevant semesters. A more general research methods course is likely to prepare students better and more broadly than any single lab course can.

FOR DETAILED UPDATES, PLEASE REFER TO THE COGNITIVE, LINGUISTIC, AND PSYCHOLOGICAL SCIENCES (CLPS) UNDERGRADUATE PAGE.

Requirements for the A.B. degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 0010</td>
<td>Mind, Brain and Behavior</td>
<td>1</td>
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<tr>
<td>CLPS 0900</td>
<td>Statistical Methods</td>
<td>1</td>
</tr>
<tr>
<td>One approved course in Cognitive Neuroscience, such as:</td>
<td></td>
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</tr>
<tr>
<td>CLPS 0400</td>
<td>Cognitive Neuroscience</td>
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</tr>
<tr>
<td>CLPS 0450</td>
<td>Brain Damage and the Mind</td>
<td></td>
</tr>
<tr>
<td>One approved course in Neuroscience, such as:</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>NEUR 0010</td>
<td>The Brain: An Introduction to Neuroscience</td>
<td></td>
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<tr>
<td>One approved course in Cognitive Neuropsychology, such as:</td>
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<tr>
<td>CLPS 0450</td>
<td>Brain Damage and the Mind</td>
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<tr>
<td>CLPS 1420</td>
<td>Cognitive Neuropsychology</td>
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<tr>
<td>One approved course in Computational Methods, such as:</td>
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<td>CLPS 0950</td>
<td>Intro to Programming</td>
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<td>CLPS 1291</td>
<td>Computational Methods for Mind, Brain and Behavior</td>
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<td>Four Approved Electives, such as:</td>
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<tr>
<td>CLPS 1150</td>
<td>Memory and the Brain</td>
<td></td>
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<tr>
<td>CLPS 1470</td>
<td>Mechanisms of Motivated Decision Making</td>
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<tr>
<td>CLPS 1480B</td>
<td>Cognitive Aging and Dementia</td>
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<td>CLPS 1480C</td>
<td>Cognitive Control Functions of the Prefrontal Cortex</td>
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<td>CLPS 1492</td>
<td>Computational Cognitive Neuroscience</td>
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<tr>
<td>CLPS 1570</td>
<td>Perceptual Learning</td>
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<td>CLPS 1620</td>
<td>Developmental Cognitive Neuroscience</td>
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<tr>
<td>NEUR 1540</td>
<td>Neurobiology of Learning and Memory</td>
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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Requirements for the Sc.B. degree

STANDARD PROGRAM FOR THE Sc.B. DEGREE ¹

<table>
<thead>
<tr>
<th>Requirement</th>
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<td>One approved course in Neuroscience, such as:</td>
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<tr>
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<tr>
<td>CLPS 0450 Brain Damage and the Mind</td>
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<td>One approved course in Computational Methods, such as:</td>
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<td>CLPS 1050 Intro to Programming</td>
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<td><strong>Four Approved Electives, such as:</strong></td>
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<tr>
<td>CLPS 1150 Memory and the Brain</td>
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<td>CLPS 1200 Computational Cognitive Neuroscience</td>
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<td>CLPS 1490 Introduction to Machine Learning</td>
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<td><strong>One Approved Laboratory Course, such as:</strong></td>
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<td>CLPS 1510 Auditory Perception Laboratory</td>
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<td><strong>Four Approved Science Courses, such as:</strong></td>
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<tr>
<td>BIOL 0200 The Foundation of Living Systems</td>
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<td>BIOL 0800 Principles of Physiology</td>
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<td>CHEM 0350 Organic Chemistry</td>
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<td>MATH 0100 Introductory Calculus, Part II</td>
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¹ For a complete list of approved courses, see the CLPS Cognitive Neuroscience page.

Cognitive Science

The field of Cognitive Science uses scientific methods of experimentation, computational modeling, and brain imaging to study mental abilities such as perception, action, memory, cognition, speech, and language, as well as the development and evolution of those processes. Students must become knowledgeable in four areas of emphasis: perception, cognition, language, and cognitive neuroscience, as well as a set of methods relevant to Cognitive Science research. Students then create their own focus area of study, potentially integrating coursework from the Cognitive, Linguistic, and Psychological Sciences department with a diverse subset of fields including Computer Science, Neuroscience, Philosophy, Anthropology, Applied Math and Education. The A.B. program is primarily for students interested in studying human mental processes and acquiring a research orientation to the study of the mind. The Sc.B. program is designed for students who wish to develop a stronger background in Cognitive Science and requires students to engage in a specific research project in the focus area of their choosing. We recommend that prospective concentrators register for one of the gateway courses and at least one other core course in their first or second year.

Concentration Requirements (Effective, Class of 2019)

The A.B. concentration requires 12 courses. The Sc.B concentration additionally requires 1 laboratory course and 4 approved science courses, totaling to a total of 17 required courses.

Common Core

The introductory course, “CLPS 0010 Mind, Brain, and Behavior,” surveys the broad territory of the scientific study of the mind, as uniquely represented by our department. The course maps the breadth of the science of the mind, focusing on fascinating questions, garnered insights, common commitments, and successful techniques and approaches. The course could be taken by students interested in the CLPS concentrations or as an introduction at the beginning of one’s college career or as an integration after having completed a number of specialized courses in a particular concentration.

CAREERS IN COGNITIVE SCIENCE AND RELATED FIELDS

Careers in Cognitive Science and related fields require familiarity with statistics. Therefore, the Cognitive Science concentration requires a course in Quantitative Methods (CLPS 0900). CLPS 0900 is a prerequisite for most of the laboratory courses, so concentrators should plan to take this course by their fourth semester. The department does not grant concentration credit of AP Statistics, regardless of score. Students who feel that CLPS 0900 is too elementary can complete an approved alternative course (e.g., APMA 1650, CLPS 2906).

Foundation

To provide students with a solid foundation of knowledge in their area of concentration and to minimize redundancy, the Cognitive Science concentration requires four foundation courses in Human Cognition, Perception, Language, and Computational Methods.

Electives

Each concentrator will take four additional courses that allow the student to go into depth in some of the relevant topics. These electives must include at least two courses in one of the four foundation topics (i.e., Human Cognition, Perception, Language, and Computational Methods). The courses designed to count as electives will often have foundation courses as prerequisites and may include laboratory courses, content courses, or seminars.
Research Methods and Capstone

Another element in the Cognitive Science concentration is a research methods course that builds on the introductory statistics course (which will be a prerequisite) but exposes students to a variety of topics in research of the mind: to empirical methods (e.g., surveys, chronometry, eye tracking, brain imaging), to common designs (e.g., factorial experimental, correlational, longitudinal), to research ethics, and to best practices of literature review. Concentrators will additionally take either a seminar course or an independent research course to serve as their capstone experience.

Additional requirements for Sc.B.

In line with university expectations, the Sc.B. requirements include a greater number of courses and especially science courses. The definition of “science” is flexible. A good number of these courses will be outside of CLPS, but several CLPS courses might fit into a coherent package as well. In addition, the Sc.B. degree also requires a lab course to provide these students with in-depth exposure to research methods in a particular area of the science of the mind.

Honors Requirement

The Research Methods course will serve as a requirement for admission to the Honors program in Cognitive Science, Cognitive Neuroscience, and Psychology. Previously, any lab course served as this requirement. This practice not only demanded a large number of lab courses as part of the CLPS curriculum but also suffered from frequent mismatches between the type of research the student wished to pursue and the type of lab course available in the relevant semesters. A more general research methods course is likely to prepare students better and more broadly than any single lab course can.

FOR DETAILED UPDATES, PLEASE REFER TO THE COGNITIVE, LINGUISTIC, AND PSYCHOLOGICAL SCIENCES (CLPS) UNDERGRADUATE PAGE.

Requirements for the A.B. degree

STANDARD PROGRAM FOR THE A.B. DEGREE

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One Independent Study or Approved Seminar, such as: 1

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<tr>
<td>CLPS 1480B</td>
<td>Cognitive Aging and Dementia</td>
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<tr>
<td>CLPS 1480C</td>
<td>Cognitive Control Functions of the Prefrontal Cortex</td>
</tr>
<tr>
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<td>Visually-Guided Action and Cognitive Processes</td>
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<tr>
<td>CLPS 1900</td>
<td>Research Design and Methods</td>
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</table>

Total Credits: 12

Requirements for the Sc.B. degree

STANDARD PROGRAM FOR THE Sc.B. DEGREE

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<tr>
<td>One approved course in Perception:</td>
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<td>CLPS 0500</td>
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<td>One approved course in Language, such as:</td>
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<tr>
<td>CLPS 0800</td>
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<td>Introduction to Programming</td>
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<td>APMA 1690</td>
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One Independent Study or Approved Seminar, such as: 1

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<tr>
<td>CLPS 1900</td>
<td>Research Design and Methods</td>
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</table>

Total Credits: 12
The concentration in Comparative Literature enables students to study literature in cross-cultural perspectives. The aim of the program is to encourage students to study a varied and illustrative range of literary topics rather than the total development of a single literary tradition. True to the spirit of Brown’s New Curriculum, a concentration in Comparative Literature affords great academic freedom. For example: advanced courses in any literature department at Brown count for concentration credit; although English is commonly one of the languages that students apply to their Comparative Literature studies, basically any language—ancient or modern—supported at Brown may form part of a Comparative Literature concentration program. In essence, concentrators study a generous range of literary works—from Western cultures, both ancient and modern, to Chinese, Japanese, and Arabic—and develop a focused critical understanding of how cultures differ from one another. Comparative Literature differs from other literature concentrations largely through its international focus and its broad-gauged view of art and culture in which the study of languages is combined with the analysis of literature and literary theory. All students take a course in literary theory and have the opportunity to complete a senior essay.

Please contact Professor Stephanie Merrim (stephanie_merrim@brown.edu), the Director of Undergraduate Studies, with questions.

There are three concentration tracks in Comparative Literature, as follows:

**Track 1: Concentration in Comparative Literature with two languages**

- Complete prerequisites(s) for taking 1000-level courses in your two languages by Semester V (students working in non-European languages may be allowed more latitude; be sure to consult a concentration advisor about constructing an individualized plan).
- Comparative Literature 1210 (COLT 1210), Introduction to the Theory of Literature.
- TEN advanced literature courses (generally 1000-level courses), including Comparative Literature 1210 and:
  a. At least TWO courses in the literature of each of your languages, and the remainder drawn chiefly from among the offerings of Comparative Literature and English, and other national literature departments.
  b. ONE COURSE chiefly devoted to EACH of the three major literary genres: poetry, drama and narrative.
  c. ONE literature course chiefly devoted to EACH OF THREE of the following five historical periods:
     - Antiquity
     - Middle Ages
     - Renaissance/Early Modern
     - Enlightenment
     - Modern. Please note that the 19th, 20th, and 21st centuries count as one period, the Modern Period.

**Track 2: Concentration in Comparative Literature with three languages**

- Complete prerequisites(s) for taking 1000-level courses in your two languages by Semester V (students working in non-European languages may be allowed more latitude; be sure to consult a concentration advisor about constructing an individualized plan).
- Complete the same requirement for your third language before Semester VII (the above proviso for students working in non-European languages also holds here).
- Comparative Literature 1210 (COLT 1210), Introduction to the Theory of Literature.
- TEN advanced literature courses (generally 1000-level courses), including Comparative Literature 1210 and:
  a. At least TWO courses in the literature of each of your languages, and the remainder drawn chiefly from among the offerings of Comparative Literature and English, and other national literature departments.
  b. ONE COURSE chiefly devoted to EACH of the three major literary genres: poetry, drama and narrative.
  c. ONE literature course chiefly devoted to EACH OF THREE of the following five historical periods:
     - Antiquity
     - Middle Ages
     - Renaissance/Early Modern
     - Enlightenment
     - Modern. Please note that the 19th, 20th, and 21st centuries count as one period, the Modern Period.

**Track 3: Concentration in Literary Translation**

- Complete prerequisites(s) for taking 1000-level courses in your two languages by Semester V (students working in non-European languages may be allowed more latitude; be sure to consult a concentration advisor about constructing an individualized plan).
- Comparative Literature 1210 (COLT 1210), Introduction to the Theory of Literature.
- ONE course or MORE in Linguistics, drawn from among these courses: Cognitive, Linguistic and Psychological Sciences 0410, Anthropology 0800, English 1210, Hispanic Studies 1210 or an acceptable substitute.
- FIVE or SIX advanced literature courses (generally 1000-level courses), including Comparative Literature 1210 and:
  a. At least TWO courses in the literature of each of your languages, and the remainder drawn chiefly from among the offerings of Comparative Literature and English, and other national literature departments.
  b. ONE COURSE chiefly devoted to EACH of the three major literary genres: poetry, drama and narrative.
  c. ONE literature course chiefly devoted to EACH OF THREE of the following five historical periods:
     - Antiquity
     - Middle Ages
     - Renaissance/Early Modern
     - Enlightenment
     - Modern. Please note that the 19th, 20th, and 21st centuries count as one period, the Modern Period.

- TWO workshops or MORE in Creative Writing
- A senior project to consist of:
  A substantial work in translation (length will vary depending upon language and genre);
  A critical introduction outlining the method used and specific problems encountered, and commenting on the history of the original work together with other translations, if any. For thesis, the student may register for COLT 1990, which will be taken in addition to the ten

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Computational Biology

Computational biology involves the analysis and discovery of biological phenomena using computational tools, and the algorithmic design and analysis of such tools. The field is widely defined and includes foundations in computer science, applied mathematics, statistics, biochemistry, molecular biology, genetics, ecology, evolution, anatomy, neuroscience, and visualization.

Students may pursue a Bachelor of Arts or a Bachelor of Science. Students pursuing the ScB have the option of electing a concentration in Computational Biology with one of three focus areas: Computer Sciences, Biological Sciences, or Applied Mathematics & Statistics. Both programs require a senior capstone experience that pairs students and faculty in creative research collaborations.

### Standard program for the A.B. degree

**Prerequisites:**

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<td>BIOL 0200</td>
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</table>

**General Core Requirements: Biology** 1

- BIOL 0470 Genetics
- BIOL 0280 Introductory Biochemistry
- or BIOL 0500 Cell and Molecular Biology
- CHEM 0330 Equilibrium, Rate, and Structure
- or CHEM 0350 Organic Chemistry
- CSCI 0150 Introduction to Object-Oriented Programming and Computer Science and Introduction to Algorithms and Data Structures
- OR
- CSCI 0170 & CSCI 0180 Computer Science: An Integrated Introduction and Computer Science: An Integrated Introduction
- OR
- CSCI 0190 Accelerated Introduction to Computer Science
- & CSCI 0180 and Computer Science: An Integrated Introduction
- & CSCI 0330 and Introduction to Software Engineering and Introduction to Computer Systems and Theory of Computation
- OR
- CSCI 1810 Computational Molecular Biology
- APMA 1080 Inference in Genomics and Molecular Biology
- AND two of the following:
  - CSCI 1820 Algorithmic Foundations of Computational Biology
  - APMA 1650 Statistical Inference I
  - CSCI 1450 Probability and Computing
  - MATH 1610 Probability

**Comp Bio Core Course Requirements** 4

- BIOL 1430 Population Genetics
- BIOL 1465 Human Population Genomics
- CSCI 1420 Machine Learning
- APMA 1690 Computational Probability and Statistics
- APMA 1660 Statistical Inference II
- Additional course with Director approval

**Total Credits** 12

**University Writing Requirement**

As part of Brown’s writing requirement, all students must demonstrate that they have worked on their writing both in their general studies and their concentration. There are a number of ways for Computational Biology concentrators to fulfill these requirements:

- Writing an Honors Thesis
- Taking a “WRIT” course in the final two years

**Capstone Experience**

Students enrolled in the computational biology concentration will complete a research project in their senior year under faculty supervision. The themes of such projects evolve with the field and the technology, but should represent a synthesis of the various specialties of the program. The requirements are either one semester of reading and research with a CCMB Faculty member or approved advisor, or a 2000-level Computational Biology course.

### Standard program for the Sc.B. degree

**Prerequisites**

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**General Core Requirements: Probability & Statistics**

- MATH 0100 Introductory Calculus, Part II (or equivalent)
- or MATH 0170 Advanced Placement Calculus
- BIOL 0200 The Foundation of Living Systems (or equivalent)
- BIOL 0470 Genetics (prerequisite BIOL 0200 or equivalent)
- BIOL 0280 Introductory Biochemistry
- or BIOL 0500 Cell and Molecular Biology
- CHEM 0330 Equilibrium, Rate, and Structure
- or CHEM 0350 Organic Chemistry
- CSCI 0150 Introduction to Object-Oriented Programming and Computer Science and Introduction to Algorithms and Data Structures
- OR
- CSCI 0170 Computer Science: An Integrated Introduction and Computer Science: An Integrated Introduction
- OR
- CSCI 0190 Accelerated Introduction to Computer Science
- & CSCI 0180 and Computer Science: An Integrated Introduction
- & CSCI 0330 and Introduction to Software Engineering and Introduction to Computer Systems and Theory of Computation
- OR
- CSCI 1810 Computational Molecular Biology
- APMA 1080 Inference in Genomics and Molecular Biology
- AND two of the following:
  - CSCI 1820 Algorithmic Foundations of Computational Biology
  - APMA 1650 Statistical Inference I
  - CSCI 1450 Probability and Computing
  - MATH 1610 Probability

**Total Credits** 24

**University Writing Requirement**

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
**General Core Requirements: Computational Biology**

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<tr>
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**Capstone Experience**

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<td>CSCI 1970</td>
<td>Individual Independent Study</td>
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**Six courses in one of the following three tracks:** 6

**Computer Science Track:**

Three of the following:

- CSCI 1230 Introduction to Computer Graphics
- CSCI 1270 Database Management Systems
- CSCI 1410 Artificial Intelligence
- CSCI 1550 Probabilistic Methods in Computer Science
- CSCI 1570 Design and Analysis of Algorithms

Three of the following:

- PHP 2620 Statistical Methods in Bioinformatics, I
- APMA 1660 Statistical Inference II
- BIOL 1430 Population Genetics
- BIOL 1465 Human Population Genomics
- APMA 1690 Computational Probability and Statistics

**Biological Sciences track:**

At least four courses comprising a coherent theme in one of the following areas: Biochemistry, Ecology, Evolution, or Neurobiology.

AND select two courses from the following:

- CSCI 1820 Algorithmic Foundations of Computational Biology
- PHP 2620 Statistical Methods in Bioinformatics, I
- APMA 1660 Statistical Inference II
- BIOL 1430 Population Genetics
- BIOL 1465 Human Population Genomics
- APMA 1690 Computational Probability and Statistics

**Applied Mathematics & Statistics Track:**

At least three courses from the following:

- APMA 1660 Statistical Inference II
- APMA 1690 Computational Probability and Statistics
- CSCI 1410 Artificial Intelligence
- APMA 0340 Methods of Applied Mathematics I, II
- APMA 0330 and Methods of Applied Mathematics I, II
- OR

At least three of the following:

- BIOL 1430 Population Genetics
- CSCI 1820 Algorithmic Foundations of Computational Biology
- PHP 2620 Statistical Methods in Bioinformatics, I
- APMA 1070 Quantitative Models of Biological Systems
- BIOL 1465 Human Population Genomics

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**Honors:**

In order to be considered a candidate for honors, students will be expected to maintain an outstanding record, with no "C"s in concentration courses and with a minimum of an "A-" average in concentration courses. In addition, students should take at least one semester, and are strongly encouraged to take 2 semesters, of reading and research with a CCMB faculty member or approved advisor. Students must submit to a public defense of their theses to be open to the CCMB community.

- Students seeking honors are advised to choose a Thesis Advisor prior to the end of their Junior year
- Students must complete the Registration form for Comp Bio and submit it to CCMB@BROWN.EDU

Any deviation from these rules must be approved by the director of undergraduate studies, in consultation with the student's advisor.

**Computer Science**

Computer science is now a critical tool for pursuing an ever-broadening range of topics, from outer space to the workings of the human mind. In most areas of science and in many liberal arts fields, cutting-edge work depends increasingly on computational approaches. The undergraduate program at Brown is designed to combine breadth in practical and theoretical computer science with depth in specialized areas. These areas range from traditional topics, such as analysis of algorithms, artificial intelligence, databases, distributed systems, graphics, mobile computing, networks, operating systems, programming languages, robotics and security, to novel areas including games and scientific visualization.

**Requirements for the Standard Track of the Sc.B. degree**

**Prerequisites (1 or 2 courses)**

Two semesters of Calculus, for example:

- MATH 0100 Introductory Calculus, Part II
- MATH 0170 Advanced Placement Calculus

**Concentration Requirements (15 courses)**

**Core-Computer Science:**

Select one of the following introductory course Series: 2

**Series A**

- CSCI 0150 Introduction to Object-Oriented Programming and Computer Science: An Integrated Introduction
- CSCI 0160 and CSCI 0180 Introduction to Algorithms and Data Structures

**Series B**

- CSCI 0170 and CSCI 0180 Computer Science: An Integrated Introduction
- CSCI 0190 Accelerated Introduction to Computer Science (and an additional CS course not otherwise used to satisfy a concentration requirement; this course may be CSCI 0180, an intermediate-level course, or an advanced course)

Select three of the following intermediate-level courses, one of which must be math-oriented and one systems-oriented: 3

- CSCI 0220 Introduction to Discrete Structures and Probability (math)
- CSCI 0320 Introduction to Software Engineering (systems)
- CSCI 0330 Introduction to Computer Systems (systems)
- CSCI 1010 Theory of Computation (math) 3
- CSCI 1450 Probability and Computing (math) 4

**Additional Computer Science Courses:**

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Select one theoretical computer science course:  1
CSCI 1010 Theory of Computation  
CSCI 1510 Introduction to Cryptography and Computer Security  
CSCI 1550 Probabilistic Methods in Computer Science  
CSCI 1570 Design and Analysis of Algorithms  
CSCI 1590 Introduction to Computational Complexity  
CSCI 1760 Multiprocessor Synchronization  
CSCI 1950H Computational Topology  
CSCI 1820 Algorithmic Foundations of Computational Biology  
CSCI 1950Y Logic for Systems  

Select one artificial intelligence course:  1
CSCI 1410 Artificial Intelligence  
CSCI 1420 Machine Learning  
CSCI 1430 Computer Vision  
CSCI 1450 Probability and Computing  
CSCI 1460 Computational Linguistics  

Select one computer science systems course:  1
CSCI 1230 Introduction to Computer Graphics  
CSCI 1260 Compilers and Program Analysis  
CSCI 1270 Database Management Systems  
CSCI 1300 User Interfaces and User Experience  
CSCI 1320 Creating Modern Web Applications  
CSCI 1380 Distributed Computer Systems  
CSCI 1600 Real-Time and Embedded Software  
CSCI 1660 Introduction to Computer Systems Security  
CSCI 1670 Operating Systems  
CSCI 1680 Computer Networks  
CSCI 1730 Design and Implementation of Programming Languages  
CSCI 1900 csciStartup  

Four additional advanced computer science or related courses.  4
Five of the 8 advanced courses must be from CS. In addition to those listed above, students can choose:
CSCI 1250 Introduction to Computer Animation  
CSCI 1280 Intermediate 3D Computer Animation  
CSCI 1370 Virtual Reality Design for Science  
CSCI 1780 Parallel and Distributed Programming  
CSCI 1800 Cybersecurity and International Relations  
CSCI 1810 Computational Molecular Biology  
CSCI 1900 csciStartup  
CSCI 1950A Computational Modeling and Algorithmic Thinking  
CSCI 1950B Computational Topology and Discrete Geometry  
CSCI 1950N 2D Game Engines  
CSCI 1950R Compiler Practice  
CSCI 1950T Advanced Animation Production  
CSCI 1950U Topics in 3D Game Engine Development  
CSCI 1950X Software Foundations  
CSCI 1950Y Logic for Systems  
CSCI 1950Z Computational Methods for Biology  
CSCI 1951A Data Science  
CSCI 1951C Designing Humanity Centered Robots  
CSCI 1951F Computers, Freedom and Privacy: Current Topics in Law and Policy  
CSCI 1951G Optimization Methods in Finance  
CSCI 1951H Software Security Exploitation  
CSCI 1951J Interdisciplinary Scientific Visualization  
CSCI 1970 Individual Independent Study  

A capstone course  1
Math: Two semesters of Mathematics or Applied Mathematics beyond MATH 0100/0170. One of these courses must be a linear algebra course
MATH 0520 Linear Algebra  
MATH 0540 Honors Linear Algebra  
CSCI 0530 Directions: The Matrix in Computer Science  

Total Credits  15

Requirements for the Professional Track of the Sc.B. degree.

The requirements for the professional track include all those of the standard track, as well as the following:
Students must complete two two-to-four-month full-time professional experiences, doing work that is related to their concentration programs. Such work is normally done within an industrial organization, but may also be at a university under the supervision of a faculty member.
On completion of each professional experience, the student must write and upload to ASK a reflective essay about the experience addressing the following prompts, to be approved by the student's concentration advisor:
• Which courses were put to use in your summer's work? Which topics, in particular, were important?
• In retrospect, which courses should you have taken before embarking on your summer experience? What are the topics from these courses that would have helped you over the summer if you had been more familiar with them?
• Are there topics you should have been familiar with in preparation for your summer experience, but are not taught at Brown? What are these topics?
• What did you learn from the experience that probably could not have been picked up from course work?
• Is the sort of work you did over the summer something you would like to continue doing once you graduate? Explain.
• Would you recommend your summer experience to other Brown students? Explain.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Requirements for the Standard Track of the A.B. degree

Prerequisites
Two semesters of Calculus, for example:

- MATH 0100 Introductory Calculus, Part II
- MATH 0170 Advanced Placement Calculus

Concentration Requirements (9 courses)

Core Computer Science:
Select one of the following series:

<table>
<thead>
<tr>
<th>Series A</th>
<th>Series B</th>
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<tbody>
<tr>
<td>CSCI 0150 &amp; CSCI 0160</td>
<td>CSCI 0170 &amp; CSCI 0180</td>
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<tr>
<td>Introduction to Object-Oriented Programming and Computer Science and Introduction to Algorithms and Data Structures</td>
<td>Computer Science: An Integrated Introduction and Computer Science: An Integrated Introduction</td>
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Series C

CSCI 0190 Accelerated Introduction to Computer Science (and an additional CS course not otherwise used to satisfy a concentration requirement; this course may be CSCI 0180, an intermediate-level course, or an advanced course)

Three intermediate courses from the following, of which one must be math-oriented and one must be systems-oriented:

- CSCI 0220 Introduction to Discrete Structures and Probability (math)
- CSCI 0320 Introduction to Software Engineering (systems)
- CSCI 0330 Introduction to Computer Systems (systems)
- CSCI 0530 Directions: The Matrix in Computer Science (math)
- CSCI 1010 Theory of Computation (math) 1
- CSCI 1450 Probability and Computing (math) 2

Four additional 1000-level courses in computer science or related areas are required. 3 of the 4 courses must be in CS 2

Total Credits: 9

1 CSCI 1010 may be used as either a math-oriented intermediate course or as an advanced course, but not as both. It was formerly known as CSCI 0510.

2 Three must be advanced courses (at the 1000-level or higher), the fourth may be either an intermediate-level course not used to satisfy a concentration requirement or an advanced course. These three courses must include a pair of courses forming a coherent theme. A list of pre-approved pairs may be found at the approved-pairs web page (http://cs.brown.edu/ugrad/concentrations/approvedpairs.html). You are not restricted to pairs on this list, but any pair not on the list must be approved by the director of undergraduate studies.

3 CSCI 1450 may be used either as a math-oriented intermediate course or as an advanced course. CSCI 1450 was formerly known as CSCI 450; they are the same course and hence only one may be taken for credit. Applied Math 1650 may be used in place of CSCI 1450. However, concentration credit will be given for only one of Applied Math 1650 and CSCI 1450.

Requirements for the Professional Track of the A.B. degree.

The requirements for the professional track include all those of the standard track, as well as the following:

Students must complete two two-to-four-month full-time professional experiences, doing work that is related to their concentration programs.

Such work is normally done within an industrial organization, but may also be at a university under the supervision of a faculty member.

On completion of each professional experience, the student must write and upload to ASK a reflective essay about the experience addressing the following prompts, to be approved by the student's concentration advisor:

- Which courses were put to use in your summer's work? Which topics, in particular, were important?
- In retrospect, which courses should you have taken before embarking on your summer experience? What are the topics from these courses that would have helped you over the summer if you had been more familiar with them?
- Are there topics you should have been familiar with in preparation for your summer experience, but are not taught at Brown? What are these topics?
- What did you learn from the experience that probably could not have been picked up from course work?
- Is the sort of work you did over the summer something you would like to continue doing once you graduate? Explain.
- Would you recommend your summer experience to other Brown students? Explain.

Computer Science-Economics

The joint Computer Science-Economics concentration exposes students to the theoretical and practical connections between computer science and economics. It prepares students for professional careers that incorporate aspects of economics and computer technology and for academic careers conducting research in areas that emphasize the overlap between the two fields. Concentrators may choose to pursue either the A.B. or the Sc.B. degree. While the A.B. degree allows students to explore the two disciplines by taking advanced courses in both departments, its smaller number of required courses is compatible with a liberal education. The Sc.B. degree achieves greater depth in both computer science and economics by requiring more courses, and it offers students the opportunity to creatively integrate both disciplines through a design requirement. In addition to courses in economics, computer science, and applied mathematics, all concentrators must fulfill the Computer Science department's writing requirement by passing a course that involves significant expository writing.


Prerequisites (3 courses):

- MATH 0100 Introductory Calculus, Part II
- MATH 0520 Linear Algebra
- CSCI 0150 Introduction to Object-Oriented Programming and Computer Science
- CSCI 0530 Directions: The Matrix in Computer Science
- ECON 0110 Principles of Economics

Required Courses (17 courses):

- CSCI 1450 Probability and Computing
- APMA 1650 Statistical Inference I
- APMA 1655 Statistical Inference I

Select one of the following Series:

Series A

- CSCI 0150 Introduction to Object-Oriented Programming and Computer Science
- CSCI 0160 Introduction to Algorithms and Data Structures

Series B

- CSCI 0170 & CSCI 0180 Computer Science: An Integrated Introduction

Series C

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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<td>ECON 1650</td>
<td>Financial Econometrics</td>
<td></td>
</tr>
<tr>
<td>ECON 1660</td>
<td>Big Data</td>
<td></td>
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<tr>
<td>ECON 1750</td>
<td>Investments II</td>
<td></td>
</tr>
<tr>
<td>ECON 1759</td>
<td>Data, Statistics, Finance</td>
<td></td>
</tr>
<tr>
<td>ECON 1810</td>
<td>Economics and Psychology</td>
<td></td>
</tr>
<tr>
<td>ECON 1820</td>
<td>Behavioral Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 1850</td>
<td>Theory of Economic Growth</td>
<td></td>
</tr>
<tr>
<td>ECON 1860</td>
<td>The Theory of General Equilibrium</td>
<td></td>
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<tr>
<td>ECON 1870</td>
<td>Game Theory and Applications to Economics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and any graduate Economics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two additional 1000-level Economics courses</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Capstone Course in either Computer Science or Economics</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>17</td>
</tr>
</tbody>
</table>

1 A list of pre-approved pairs may be found at the approved-pairs web page (http://www.cs.brown.edu/ugrad/concentrations/approvedpairs.html). You are not restricted to pairs on this list, but any pair not on the list must be approved by the CS director of undergraduate studies. CSCI 1450 may not be used to satisfy this requirement.

2 Or ECON 1110, with permission.

3 A one-semester course, normally taken in the student’s last undergraduate year, in which the student (or group of students) use a significant portion of their undergraduate education, broadly interpreted, in studying some current topic (preferably at the intersection of computer science and economics) in depth, to produce a culminating artifact such as a paper or software project.

### Standard Program for the A.B. degree:

#### Prerequisites (3 courses):

- MATH 0100 Introductory Calculus, Part II
- MATH 0520 Linear Algebra
- or MATH 0540 Honors Linear Algebra
- or CSCI 0350 Directions: The Matrix in Computer Science

#### Required Courses (13 courses):

**Series A**

- CSCI 1450 Probability and Computing
- or APMA 1650 Statistical Inference I
- or APMA 1655 Statistical Inference I

Select one of the following series: 2

**Series B**

- CSCI 0150 Introduction to Object-Oriented Programming and Computer Science and Introduction to Algorithms and Data Structures

**Series C**

- CSCI 0190 Accelerated Introduction to Computer Science (and an additional CS course not otherwise used to satisfy a concentration requirement; this course may be CSCI 0180, an intermediate-level course, or a 1000-level course)

Two of the following intermediate courses, one of which must be math-oriented and one systems-oriented: 2

### Undergraduate Concentrations

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).


| Total Credits | 13 |

1. Or ECON 1110, with permission.

**Honors**

Students who meet stated requirements are eligible to write an honors thesis in their senior year. Students should consult the listed honors requirements of whichever of the two departments their primary thesis advisor belongs to, at the respective departments’ websites.

**Professional Track**

The requirements for the professional track include all those of the standard track, as well as the following:

Students must complete two two-to-four-month full-time professional experiences, doing work that is related to their concentration programs. Such work is normally done within an industrial organization, but may also be at a university under the supervision of a faculty member. On completion of each professional experience, the student must write and upload to ASK a reflective essay about the experience addressing the following prompts, to be approved by the student’s concentration advisor:

- Which courses were put to use in your summer's work? Which topics, in particular, were important?
- In retrospect, which courses should you have taken before embarking on your summer experience? What are the topics from these courses that would have helped you over the summer if you had been more familiar with them?
- Are there topics you should have been familiar with in preparation for your summer experience, but are not taught at Brown? What are these topics?
- What did you learn from the experience that probably could not have been picked up from course work?
- Is the sort of work you did over the summer something you would like to continue doing once you graduate? Explain.
- Would you recommend your summer experience to other Brown students? Explain.

### Contemplative Studies

The concentration in Contemplative Studies investigates the underlying philosophical, psychological, and scientific bases of human contemplative experience. Students pursue a “third person” academic approach drawn from the humanities and sciences to analyze the cultural, historical, and scientific underpinnings of contemplative experiences in religion, art, music, and literature. This is developed in combination with a “critical first-person” approach based in practical experience of contemplative techniques and methods to provide an integrated understanding of the role of contemplative thought and experience in societies and on the individuals who constitute them.

#### Concentration Core (6 courses total including Senior Capstone Seminar)

COST 0100 Introduction to Contemplative Studies 1

Two science courses that focus on the cognitive neurological functioning of the human brain and how contemplative practices affect it.

- CLPS 0040 Mind and Brain: Introduction to Cognitive Neuroscience
- CLPS 0200 Human Cognition
- CLPS 0500 Perception and Mind
- NEUR 0010 The Brain: An Introduction to Neuroscience

Select one from following list:

- APMA 0410 Mathematical Methods in the Brain Sciences
- NEUR 1030 Neural Systems
- One statistics course (others with approval) 1

Select one from following list:

- APMA 1560 Statistical Inference I
- APMA 2906 Experimental Design

#### Track Requirements (6 additional courses)

Students must complete either a Science or Humanities track in addition to the concentration core.

### Science Track

The Science track in Contemplative Studies gives concentrators in-depth understanding of the scientific methods used to investigate the cognitive neuroscience of contemplative practice. Students will be taught how to critique current research as well as how to develop, operationalize, and test hypotheses related to contemplative practice. Students will become well-versed in how to study first-person reports related to the phenomenology of contemplative experience as a foundation for formulating third-person tests of the effects of practice on brain function and behavior. The Contemplative Studies Science Track trains students to investigate these types of questions not only for academic scholarship, but also to provide a method of self-inquiry that can be used to augment any area of life.

Three thematic science courses drawn primarily from NEUR and CLPS, at least two of which must be 1000-level

- APMA 0410 Mathematical Methods in the Brain Sciences
- CLPS 0400 Cognitive Neuroscience
- CLPS 1291 Computational Methods for Mind, Brain and Behavior
- CLPS 1400 The Neural Bases of Cognition
- CLPS 1492 Computational Cognitive Neuroscience
- NEUR 1020 Principles of Neurobiology
- NEUR 1030 Neural Systems
- One statistics course (others with approval) 1

Two semesters of laboratory research in an established lab (e.g. BIOL 1950/1960)

### Humanities Track

The Humanities track explores the origin and development of contemplative practices within specific religious, cultural, and historical contexts and gives students a foundation in the Philosophy of Mind relevant to the scientific study of contemplative practice. Students will choose a concentration program that includes three intermediate and three advanced seminars drawn from the two areas below. While it is recommended that students focus primarily on one of these two areas, the precise balance of the individual concentration program for each student will be established with the concentration advisor when the student applies to enter the concentration, normally in their fourth semester of study.

Six Courses total from across the two areas below:

- ANTH 1240 Religion and Culture
- CLAS 1120G The Idea of Self
- CLAS 1140 Classical Philosophy of India
- PHIL 0010 The Place of Persons
- PHIL 0020 Mind and Matter
- PHIL 0350 Ancient Philosophy
- RELS 0040 Great Contemplative Traditions of Asia
- RELS 0065 On Being Human: Religious and Philosophical Conceptions of Self
- RELS 0120 The Classical Chinese Philosophy of Life
- RELS 0130 Religions of Classical India

Senior Capstone Seminar (UNIV 1010) 1
Contemplative Religious Traditions

CLAS 0850 Mythology of India
CLAS 0855 The Bhagavad Gītā
EAST 1420 The Confucian Mind
EAST 1880D Early Daoist Syncretism: Zhuang Zi and Huanan Zi
RELS 0056 Spiritual But Not Religious: Making Spirituality in America
RELS 0530 Laozi and the Daodejing
RELS 0911 Buddhism in India
RELS 1370B Philosophy of Mysticism
RELS 1441 Zen Meditation in China, Korea, and Japan

The Philosophy of Mind

PHIL 0990L Valuing Persons
PHIL 1520 Consciousness
PHIL 1590 Philosophy of Science
PHIL 1650 Moral Theories
PHIL 1660 Metaphysics
PHIL 1750 Epistemology
PHIL 1720 Kant: The Critique of Pure Reason
PHIL 1770 Philosophy of Mind
UNIV 1520 The Shaping of World Views

Honors Requirement

Students with a minimum GPA of 3.5 in the concentration may apply for entrance into the Honors program in the middle of their sixth semester. To apply, students submit a proposal for a senior thesis project describing the work to be undertaken and its relevance to the field of Contemplative Studies, along with a copy of their academic transcript. Students accepted into Honors must complete the required Capstone seminar, UNIV 1010, and enroll in an additional semester of independent study in their advisor’s department. Students must complete an Honors Thesis to the satisfaction of their advisor and present the results of their studies in formal talks or poster sessions open to all interested faculty and students.

Development Studies

Development Studies is an interdisciplinary concentration whose main mission is to provide students with the knowledge, critical perspectives and skills they need to engage with the issues of economic and social development, especially as they relate to the Global South. The concentration is grounded in the social sciences – anthropology, sociology, political science, and economics – but it also heavily draws from history, art, and other disciplines in the humanities. The requirements are designed with three goals in mind: first, provide concentrators a solid foundation in the question of development; second, allow concentrators to develop expertise in a specific region that is of interest to them; third, give concentrators access to a wide range of courses in a large number of disciplines of interest to them. Concentrators are encouraged to do their own original field research. During the senior year, concentrators complete a capstone experience tailored to their interests (http://brown.edu/academics/development-studies/about/what-ds-capstone) in some aspect of international development. Towards this end, they benefit from extensive faculty and peer support.

Requirements

10 Courses + Language + Capstone

CORE

All core courses must be taken prior to senior year
Choose TWO from the following:

SOC 1620 Globalization and Social Conflict
POLS 1240 Politics, Markets and States in Developing Countries

ANTH 0110 Anthropology and Global Social Problems: Environment, Development, and Governance
SEMINAR IN SOCIOLOGY OF DEVELOPMENT
DEVL 1000/ SOC 1871D Sophomore Seminar in Sociology of Development (SOC 1871D) (Pre-requisites: sophomore or junior standing, and completion of SOC 1620, POLS 1240, or ANTH 0110)

Development Economics - Choose ONE of the following:
ECON 0510 Development and the International Economy (Prerequisite: ECON 0110, or AP Microeconomics 4 and AP Macroeconomics 4, or IB HL Economics 6)
ECON 1510 Economic Development (Prerequisite: ECON 1110 or ECON 1130; and APMA 1650 or ECON 1620 or ECON 1630)

Research Methods and Design
DEVL 1500 Methods in Development Research (junior year)

Regional Courses
Two courses that focus on the same region of the developing world. Should complement the student's foreign language.

Elective Courses
Three courses chosen from a list of pre-approved electives or by special approval.

Foreign Language
Equivalent of three full years of university study or above.

Senior Capstone
a. Thesis option: DEVL 1980 (fall senior year) and DEVL 1990 (spring senior year), or
b. Capstone seminar option: approved senior seminar in Development Studies, with seminar-length paper requirement.

See the Development Studies website (http://brown.edu/academics/development-studies) for the list of pre-approved elective courses.

East Asian Studies

East Asian Studies is a multidisciplinary concentration designed for students wishing to attain reasonable fluency in Chinese, Japanese, or Korean with specialized exposure to selected East Asian subjects. It serves students with two types of interests: those who aim to pursue active professional careers related to the East Asian region; and those who want to pursue graduate study in the humanities or social sciences with particular emphasis on China, Japan or Korea. Students in East Asian Studies will gain language proficiency and familiarity with East Asia through advanced courses in a variety of disciplines. Concentrators are strongly encouraged, but not required, to study in East Asia for one or two semesters. The concentration requires students to demonstrate a basic proficiency in Chinese, Japanese, or Korean.

The Language Requirement

The concentration requires students to demonstrate a basic proficiency in Chinese, Japanese, or Korean. For the purposes of the concentration, proficiency is determined to be consistent with successful completion of the Department’s third-year course sequence in Chinese, Japanese, or Korean (0500-0600), or its equivalent. Native speakers of these languages may, for example, demonstrate competency such that language courses may be unnecessary. Department language instructors may also determine that course work completed at one of the language-intensive study abroad programs attended by our undergraduates is comparable to courses offered at Brown. Up to three upper level (700-999) may count as electives for concentration credit.
Note that we do not equate completion of third-year Chinese, Japanese, or Korean with fluency in these languages. Rather, we believe that students who have demonstrated the skills associated with third-year Chinese, Japanese, or Korean have acquired a foundational understanding of the languages' grammar, vocabularies, and conversational patterns, such that they are able to make themselves understood in everyday situations, and to understand both spoken and written communication.

For the purposes of the concentration, language courses through the third-year are treated as an accompanying requirement.

**Language Prerequisites (demonstrating proficiency through the third-year or 0600 level in one of the three languages below)**

### Chinese
- CHIN 0100 & CHIN 0200: Basic Chinese
- CHIN 0300 & CHIN 0400: Intermediate Chinese
- CHIN 0500 & CHIN 0600: Advanced Modern Chinese I & Advanced Modern Chinese I

### Japanese
- JAPN 0100 & JAPN 0200: Basic Japanese
- JAPN 0150 & JAPN 0250: Advanced Beginning Japanese
- JAPN 0300 & JAPN 0400: Intermediate Japanese

### Korean
- KREA 0100: Korean
- KREA 0200 & KREA 0400: Intermediate Korean
- KREA 0500: Advanced Korean
- KREA 0600: Advanced Korean

**Language Electives (language courses that may be counted for concentration credit)**

### Chinese
- CHIN 0700 & CHIN 0800: Advanced Modern Chinese II and Advanced Modern Chinese II (either course may be taken for one semester)
- CHIN 0910B: Introduction to Classical Chinese
- CHIN 0910C: The Changing Face of China: Advanced Reading in Chinese Media
- CHIN 0920D: Business Chinese
- CHIN 1040: Modern Chinese Literature

### Japanese
- JAPN 0700 & JAPN 0800: Advanced Japanese II and Advanced Japanese II (either course may be taken for one semester)
- JAPN 0910A: Classical Japanese
- JAPN 0910B: Japanese Cities: Tokyo and Kyoto
- JAPN 0910C: Japanese Linguistics
- JAPN 0920A: Business Japanese
- JAPN 0910D: Two Virgins in the Attic: Advanced Japanese Readings in Canonical and Popular Literature
- JAPN 0910E: Advanced Reading for Research
- JAPN 1310: Japanese Linguistics: Communication and Understanding Utterances

### Korean
- KREA 0910B: Media Korean

**Electives**

The concentration requires that students complete a total of eight electives tied to their course of study, which may be defined in linguistic, chronological, thematic, or cultural terms. Students should choose their courses with the following three requirements in mind.

- **EAST Requirement:** At least three of the eight electives must be East Asian Studies (EAST) courses; Chinese (CHIN), Japanese (JAPN), or Korean (KREA) courses at the 1000-level and above may also count toward this requirement.
- **Breadth Requirement:** At least one of the eight electives must focus on an East Asian country or culture other than those associated with the language the student is using to satisfy the concentration's language requirement. A concentrator studying Chinese, for example, must choose at least one course that focuses on Korea and/or Japan.
- **Senior Seminar Requirement:** At least one of the eight elective courses must be an advanced research seminar, taken in the senior year.

As is common for interdisciplinary concentrations, a wide range of courses, including many taught by faculty in other departments, may be counted toward the concentration. These include courses offered by East Asian Studies faculty, faculty with courtesy appointments in the Department, and courses with a significant focus on East Asia offered in such disciplines as American Studies, Art History, Economics, International Relations, and many others.

**Sample Electives offered by East Asian Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST 0500</td>
<td>Childhood and Culture in Japan</td>
<td>1</td>
</tr>
<tr>
<td>EAST 1010</td>
<td>From Basho to Banana: Four Centuries of Japanese Literature</td>
<td>1</td>
</tr>
<tr>
<td>EAST 1070</td>
<td>China Modern: An Introduction to the Literature of Twentieth-Century China</td>
<td>1</td>
</tr>
<tr>
<td>EAST 1100</td>
<td>Korean Culture and Film</td>
<td>1</td>
</tr>
<tr>
<td>EAST 1200</td>
<td>Pop, Political and Patrician: Culture in Japan and the Koreas</td>
<td>1</td>
</tr>
<tr>
<td>EAST 1270</td>
<td>China Through the Lens: History, Cinema, and Critical Discourse</td>
<td>1</td>
</tr>
</tbody>
</table>

For additional elective choices, visit [http://brown.edu/academics/east-asian-studies/courses/more-course-offerings](http://brown.edu/academics/east-asian-studies/courses/more-course-offerings).

### Advanced Research Seminars

At least one of the eight elective courses must be an advanced research seminar, taken in the senior year. The research seminar will normally provide students with the opportunity to develop a project or paper focusing on one or more of their areas of inquiry within the concentration. Students are strongly encouraged to find ways to incorporate the use of Chinese, Japanese or Korean language materials in their research and learning in these courses. Courses falling into this category include the East Asian Studies 1950 series as well as designated seminars offered by faculty in such departments as History, Religious Studies, and Comparative Literature among others. The Department will provide a list of pre-approved advanced seminars every semester. Students wishing to add courses to that list must submit their requests in writing to the Director of Undergraduate Studies at the start of the semester.

**Sample advanced seminars offered by East Asian Studies**

<table>
<thead>
<tr>
<th>Seminar Code</th>
<th>Seminar Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST 1950G</td>
<td>Market Economy, Popular Culture, and Mass Media in Contemporary China</td>
<td>1</td>
</tr>
<tr>
<td>EAST 1950X</td>
<td>Queer Japan: Culture, History and Sexuality</td>
<td>1</td>
</tr>
</tbody>
</table>
**EAST 1950W** Translating Korean: Fiction, Poetry, Film and K-Pop

**Honors**

East Asian Studies offers qualified students, in their senior year, the opportunity to undertake a sustained research and writing project that, ideally, will result not merely in a long term paper, but in a piece of original scholarship. To enroll in the Honors Program, the student must be a senior East Asian Studies concentrator, with at least a high B average in concentration courses. Candidates for Honors are required to have developed a competence in an East Asian language sufficient to allow them to use East Asian language materials in carrying out their research. Students must also successfully obtain the support of at least two faculty members who will agree to serve as primary and secondary advisors for the thesis. Prospective writers submit a thesis prospectus, brief bibliography, and completed application forms (with signatures), ordinarily late in the student’s six semester, to the Director of Undergraduate Studies, who provides the final permission to proceed. Synopses of successful thesis proposals will be distributed to Department faculty.

Thesis writers enroll in advisor-specific sections of the thesis-writing course EAST 1930 (Fall) and EAST 1940 (Spring), meet regularly with their advisors over the course of both semesters, and submit final versions of their theses to the Department in mid-April. Advisors and students are required to provide updates of their progress to the Director of Undergraduate Studies at regular intervals.

The completed thesis is evaluated for Honors by the thesis director and by a second reader. In case of a difference of judgment between the two readers, a third opinion may be sought. The awarding of Honors in East Asian Studies will occur only if the Honors Thesis receives a final grade of A. If an A is not received, the student will still receive academic credit for EAST 1930-1940. Students are notified in mid-May whether the Department has recommended the awarding of Honors. Copies of readers’ comments are provided to the student.

All graduating concentrators will present the results of their senior theses in the department’s Senior Project Forum. The Forum will usually take place at the end of the spring semester, but may also occur at the end of the fall semester to accommodate mid-year graduates.

**Double Concentrations**

Students who are interested in developing a double concentration, including East Asian Studies as one of the two concentrations, should bear in mind that normally no more than two courses may be double-counted toward satisfying the course requirements of either of the two concentration programs involved.

**Study Abroad**

Concentrators are strongly encouraged, but not required, to study in East Asia for one or two semesters during their undergraduate years. Course credits earned abroad are generally transferable to Brown. However, a maximum of three courses taken abroad, of genuine intellectual substance and significantly related to East Asian Studies, may be considered for concentration credit.

**Summary of requirements:**

- Language study through the level of 0600 or the equivalent of Chinese, Japanese, or Korean
- Eight elective courses
  - At least three of the eight must be East Asian Studies (EAST) courses; Chinese (CHIN), Japanese (JAPN), or Korean (KREA) courses at the 1000-level and above may also count toward this requirement
  - At least one of the eight electives must focus on an East Asian country or culture other than those associated with the language the student is using to satisfy the concentration’s language requirement. A concentrator studying China, for example, would choose at least one course that focuses on Korea and/or Japan.
  - At least one of the eight must be an advanced research seminar, taken in the senior year.
- EAST 1930 (Senior Thesis, Semester 1) - EAST 1940 (Senior Thesis, Semester 2) for Honors candidates only

**Economics**

Economics is the study of how individuals, businesses, and governments allocate resources to satisfy their objectives. The study of economics helps students understand markets, firms, financial organizations, and public debate about economic policy, including taxation, government expenditure, trade, globalization, health, and welfare. The concentration in Economics prepares students for graduate study in fields such as business and law, for graduate study leading to teaching and research in economics, and can be a steppingstone to employment in business, finance, non-profit, and government organizations. Students may choose either the standard or the professional track.

Students are required to begin with ECON 0110, an introductory course that stresses the economic problems of our society, and the vocabulary and principles of economic analysis. Intermediate level courses in microeconomics (ECON 1130), macroeconomics (ECON 1210), and econometrics (ECON 1620) round out the list of foundation courses for the concentration. Economics students must also fulfill a calculus requirement.

The economics department sponsors a number of concentration options. The most popular is the standard economics concentration, described below. Three additional concentration options are administered jointly with other departments and are described separately under their respective titles. They are the concentrations in applied mathematics–economics, in mathematical economics, and in computer science–economics. The first two are especially recommended for students interested in graduate study in economics.

The department offers many of the required courses in an interdepartmental concentration called Business, Entrepreneurship and Organizations (BEO). BEO is jointly run by the departments of economics and sociology, and the school of engineering. BEO has three possible “tracks,” of which the business economics track is most closely related to economics. Please contact the BEO administrator for more details, including information about advising in that concentration.

**Standard Economics Concentration**

<table>
<thead>
<tr>
<th>Mathematics Course Requirements: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100 Introductory Calculus, Part II</td>
</tr>
<tr>
<td>or a higher-level math course.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Economics Course Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0110 Principles of Economics 3</td>
</tr>
<tr>
<td>ECON 1110 Intermediate Microeconomics</td>
</tr>
<tr>
<td>or ECON 1130 Intermediate Microeconomics (Mathematical)</td>
</tr>
<tr>
<td>ECON 1210 Intermediate Macroeconomics</td>
</tr>
<tr>
<td>ECON 1620 Introduction to Econometrics</td>
</tr>
<tr>
<td>ECON 1629 Applied Research Methods for Economists</td>
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<tr>
<td>or ECON 1630 Econometrics I</td>
</tr>
</tbody>
</table>

At least five additional 1000-level Economics courses. 2

<table>
<thead>
<tr>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
</tr>
</tbody>
</table>

1 Note that certain advanced economics courses may impose additional mathematical prerequisites. The standard mathematics requirement may be met through Advanced Placement tests, but “placing into” a higher level mathematics course than MATH 0100, without actually taking that higher level course, does not satisfy the requirement. The AP mathematics credit must appear on your Brown transcript.

2 Note that ECON 1960 (thesis) and ECON 1940 do not count for concentration credit.

3 If placing out of ECON 0110 with AP or IB test scores, one must take an additional 1000-level course (6 instead of 5).

All concentrators in economics programs are encouraged to consult their concentration advisors regularly. Economics concentrators who wish to study abroad should consult first with the department transfer credit advisor.
Honors

Students who wish to enroll in the honors program in economics should consult the department's undergraduate guide (available on its web site) to obtain a complete description of the requirements. See the description of Capstone Projects there, as well. Courses taken to prepare an honors thesis are in addition to the regular concentration requirements.

Professional Track

The requirements for the professional track include all those of the standard track, as well as the following:

Students must complete two two-to-four month full-time professional experiences, doing work that is related to their concentration programs. Such work is normally done within an industrial organization, but may also be at a university under the supervision of a faculty member.

On completion of each professional experience, the student must write and upload to ASK a reflective essay about the experience addressing the following prompts, to be approved by the student's concentration advisor:

- Which courses were put to use in your summer's work? Which topics, in particular, were important?
- In retrospect, which courses should you have taken before embarking on your summer experience? What are the topics from these courses that would have helped you over the summer if you had been more familiar with them?
- Are there topics you should have been familiar with in preparation for your summer experience, but are not taught at Brown? What are these topics?
- What did you learn from the experience that probably could not have been picked up from course work?
- Is the sort of work you did over the summer something you would like to continue doing once you graduate? Explain.
- Would you recommend your summer experience to other Brown students? Explain.

Education Studies

Education Studies takes a multidisciplinary, liberal arts approach to the field of education while focusing on the study of human learning and development, the history of education, teaching, school reform, and education policy. Concentrators choose an area of emphasis, either Policy-and-History or Human Development. Policy-and-History provides the historical underpinnings and intellectual skills for students to think critically about education issues in a number of settings. In the Human Development area, students learn about psychological, social, and cultural processes in a variety of contexts, including schools, families, peer groups, and neighborhoods, particularly in urban settings. Additionally, the Department offers teacher certification programs in elementary and secondary education. Finally, concentrators might also consider pursuing the Engaged Scholars Program, which allows students to connect theory and practice and gain hands-on experience working with community partners. Luther Spoehr (luther_spoehr@brown.edu) is the Director of Undergraduate Studies, and advisor to all seniors and to juniors on the Policy-and-History track. Yoko Yamamoto (yoko_yamamoto@brown.edu) advises juniors on the Human Development track and all sophomores.

Concentration Requirements

The concentration in Education Studies requires a total of 10 courses. At least eight must be taken in the Education Department at Brown University. One course must either be a qualitative methods course (EDUC 1100) or a quantitative methods course (EDUC 1110) or an approved equivalent in another department. Five courses must be taken in one of the two Areas of Emphasis, either Human Development or Policy-and-History. Electives may be additional Brown University Education courses, courses chosen from a list of pre-approved Brown University courses outside the Education Department, or courses at Brown or other universities that receive specific approval in advance from the Director of Undergraduate Studies.

Students in the Human Development Area of Emphasis should note that because they must take a foundational course in History and another in Policy, they will need only two additional Electives to meet the ten-course requirement. Students in the Policy-and-History Area of Emphasis must take one foundational course in Human Development plus one additional Education course outside Policy-and-History, plus two Electives. Electives may include any Education courses taken outside the Area of Emphasis or approved courses taken in other departments.

Concentrators are required to take at least one foundational course in each of four Core Categories: Human Development, History, Policy, and Research Methods. Foundational courses taken in the Area of Emphasis count toward the total of 5 required for that Area of Emphasis.

Foundational courses available in each of the required Core Categories:

**Foundational Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 0800</td>
<td>Introduction to Human Development and Education</td>
</tr>
<tr>
<td>EDUC 1270</td>
<td>Adolescence in Social Context</td>
</tr>
<tr>
<td>EDUC 1020</td>
<td>The History of American Education</td>
</tr>
<tr>
<td>EDUC 1200</td>
<td>History of American School Reform</td>
</tr>
<tr>
<td>EDUC 1060</td>
<td>Politics and Public Education</td>
</tr>
<tr>
<td>EDUC 1130</td>
<td>Economics of Education I</td>
</tr>
<tr>
<td>EDUC 1100</td>
<td>Introduction to Qualitative Research Methods</td>
</tr>
<tr>
<td>EDUC 1110</td>
<td>Introductory Statistics for Education Research and Policy Analysis</td>
</tr>
</tbody>
</table>

**Courses in Human Development Area of Emphasis**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 0410E</td>
<td>Empowering Youth: Insights from Research on Urban Adolescents</td>
</tr>
<tr>
<td>EDUC 0800</td>
<td>Introduction to Human Development and Education</td>
</tr>
<tr>
<td>EDUC 1270</td>
<td>Adolescence in Social Context</td>
</tr>
<tr>
<td>EDUC 1430</td>
<td>Social Psychology of Race, Class, and Gender</td>
</tr>
<tr>
<td>EDUC 1450</td>
<td>The Psychology of Teaching and Learning</td>
</tr>
<tr>
<td>EDUC 1580</td>
<td>Cross-Cultural Perspectives on Child Development</td>
</tr>
<tr>
<td>EDUC 1700</td>
<td>The Asian American Experience in Higher Education</td>
</tr>
<tr>
<td>EDUC 1710</td>
<td>History and Theories of Child Development</td>
</tr>
<tr>
<td>EDUC 1750</td>
<td>Contemporary Social Problems: Views from Human Development and Education</td>
</tr>
<tr>
<td>EDUC 1850</td>
<td>Moral Development and Education</td>
</tr>
<tr>
<td>EDUC 1860</td>
<td>Social Context of Learning and Development</td>
</tr>
<tr>
<td>EDUC 1870</td>
<td>Education and Human Development in East Asia</td>
</tr>
<tr>
<td>EDUC 1880</td>
<td>Human Development in the Context of Immigration</td>
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</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Courses in Policy-and-History Area of Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 0400</td>
<td>The Campus on Fire: American Colleges and Universities in the 1960's</td>
</tr>
<tr>
<td>EDUC 0410B</td>
<td>Controversies in American Education Policy: A Multidisciplinary Approach</td>
</tr>
<tr>
<td>EDUC 0410E</td>
<td>Empowering Youth: Insights from Research on Urban Adolescents</td>
</tr>
<tr>
<td>EDUC 0610</td>
<td>Brown v. Board of Education</td>
</tr>
<tr>
<td>EDUC 0850</td>
<td>History of Intercollegiate Athletics</td>
</tr>
<tr>
<td>EDUC 1020</td>
<td>The History of American Education</td>
</tr>
<tr>
<td>EDUC 1030</td>
<td>Comparative Education</td>
</tr>
<tr>
<td>EDUC 1035</td>
<td>Decolonizing African Education: Student Activism and Social Change, 1960-present</td>
</tr>
<tr>
<td>EDUC 1040</td>
<td>Sociology of Education</td>
</tr>
<tr>
<td>EDUC 1050</td>
<td>History of African-American Education</td>
</tr>
<tr>
<td>EDUC 1060</td>
<td>Politics and Public Education</td>
</tr>
<tr>
<td>EDUC 1130</td>
<td>Economics of Education I</td>
</tr>
<tr>
<td>EDUC 1150</td>
<td>Education, the Economy and School Reform</td>
</tr>
<tr>
<td>EDUC 1160</td>
<td>Evaluating the Impact of Social Programs</td>
</tr>
<tr>
<td>EDUC 1200</td>
<td>History of American School Reform</td>
</tr>
<tr>
<td>EDUC 1630</td>
<td>Strategic Management for School System Excellence</td>
</tr>
<tr>
<td>EDUC 1650</td>
<td>Policy Implementation in Education</td>
</tr>
<tr>
<td>EDUC 1720</td>
<td>Urban Schools in Historical Perspective</td>
</tr>
<tr>
<td>EDUC 1730</td>
<td>American Higher Education in Historical Context</td>
</tr>
<tr>
<td>EDUC 1740</td>
<td>Academic Freedom on Trial: A Century of Campus Controversies</td>
</tr>
</tbody>
</table>

Additional Education courses available as Electives for either Area of Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 0900</td>
<td>Fieldwork and Seminar in Secondary Education</td>
</tr>
<tr>
<td>EDUC 0950</td>
<td>Learning About Learning: Classrooms in Context</td>
</tr>
<tr>
<td>EDUC 1010</td>
<td>The Craft of Teaching</td>
</tr>
<tr>
<td>EDUC 1090</td>
<td>Adolescent Literature</td>
</tr>
<tr>
<td>EDUC 1560</td>
<td>Philosophy of Education: Educational Thought and Practice</td>
</tr>
<tr>
<td>EDUC 1690</td>
<td>Literacy, Community, and the Arts: Theory into Practice</td>
</tr>
</tbody>
</table>

Honors

Concentrators seeking to graduate with honors must apply for honors candidacy by the end of their sixth semester. Successful candidates must meet all requirements for the concentration; maintain a minimum grade average that includes more A's than B's in Education courses (a B must be counterbalanced by two A's): and successfully complete EDUC 1990 and EDUC 1991, in which they write a senior thesis under the guidance of a thesis advisor. Honors are awarded on the basis of thesis quality. Students whose theses meet or exceed the standards established in the Department Rubric earn honors upon graduation.

Capstone

Capstones are voluntary, student-initiated projects or experiences outside the classroom that build on and contribute to students’ Education Studies concentration. They can take various forms, including a research project, website design, curriculum design, policy analysis, or scholarly paper. Capstones can be designed and executed in the senior year, or can be based on a previous experience that the student wants to explore further in some way, such as an internship or teaching experience. While capstones do not confer academic credit or departmental honors, students who complete capstones will be recognized at the department graduation ceremony and will have the opportunity to present their work at a conference in the spring of their senior year. Through capstones, students have the opportunity to work closely with a faculty member in an area of their interest and are able to reflect on and extend their learning in the concentration.

Undergraduate Teacher Education Program (regardless of student start date)

Note: The Undergraduate Teacher Education Program is not a concentration. It consists of a series of courses which will prepare students for secondary teacher certification.

The Department of Education, in cooperation with other departments, offers a program of study in teacher education leading to certification in secondary school teaching: the Undergraduate Teacher Education Program (UTEP). This program is offered in English, History/Social Studies, Science (Biology, Chemistry, or Engineering/Physics), and leads to state certification for public school teaching in these fields.

The Undergraduate Teacher Education Program consists of three components: courses in educational theory, courses in the teaching field, and student teaching. These are designed to complement and enhance the liberal education derived from concentration courses and electives.

Students who are interested in completing the Undergraduate Teacher education Program must confer with the Education Department as early as possible in order to plan a coherent program. The program includes a methods course, offered during the summer in conjunction with teaching at Brown Summer High School, between Semesters VI and VII.

Courses in the teaching field

Because the program emphasizes the importance of knowledge in the teaching field, students are required to complete an academic concentration in the subject which they are preparing to teach or a closely related field. This does not mean that a student must elect a standard concentration in the field. However, such a student must, as part of or in addition to his/her chosen concentration, elect a substantive number of courses in his/her teaching field. Students considering the program should consult with advisors both in the academic department and in the Education Department to design an appropriate program of study that meets Rhode Island state certification requirements and those of many other states.

All of the required courses in education must be taken at Brown. None can be transferred for credit from other institutions. Requirements of the program include:

- EDUC 0900  Fieldwork and Seminar in Secondary Education
- EDUC 1450  The Psychology of Teaching and Learning
- EDUC 1070A  Student Teaching: English
  or EDUC 1070B Student Teaching: History and Social Studies
  or EDUC 1070C Student Teaching: Science
- EDUC 1080A  Analysis of Teaching: English
  or EDUC 1080B Analysis of Teaching: History and Social Studies
  or EDUC 1080C Analysis of Teaching: Science

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Egyptology and Assyriology

The concentration in Egyptology and Assyriology offers students a choice of two tracks: Assyriology or Egyptology. The department promotes collaborations with other academic units at Brown devoted to the study of antiquity including Archaeology, Classics, Judaic Studies, and Religious Studies. Egyptology and Assyriology also collaborates with Brown’s Joukowsky Institute for Archaeology and the Ancient World.

Assyriology Track

Also known as the Near East or Middle East, Western Asia includes present-day Iraq, Syria, Turkey, and other neighboring states, a broad geographic area that was connected in antiquity with the wider world—the Mediterranean, North Africa, the Arabian Peninsula, Central Asia, and the Asian subcontinent. Students will be exposed to the critical study of the ancient cultures of this region (ca. 3400 B.C.E.–100 C.E.) using the tools of archaeology, epigraphy, and historical inquiry. A variety of interdisciplinary, comparative, and theoretical approaches will be introduced to give students the tools and methods to explore this region’s ancient languages and literatures, political and socio-economic modes of organization, art and architecture, religious traditions and other systems of knowledge, such as early science.

The Assyriology (ASYR) track requires a total of at least ten (10) courses that are determined in the following way:

Introductory courses: 3
- ASYR 0800 The Cradle of Civilization? An Introduction to the Ancient Near East
- or ARCH 0370 Before the Islamic State: The Archaeologies of Ancient Mesopotamia
- or ARCH 1600 Archaeologies of the Near East

Foundational Courses (at least one course from each of the following three areas):
- History and Culture of Ancient Western Asia: 1
  - ASYR 1100 Imagining the Gods: Myths and Myth-making in Ancient Mesopotamia (WRIT)
- ASYR 1500 Ancient Babylonian Magic and Medicine
- ASYR 2310B Assyriology I (WRIT)
- ASYR 2310C Assyriology II (WRIT)
- ASYR 2600 Topics in Cuneiform Studies
- Ancient Scholarship in Western Asia: 1
  - ASYR 1600 Astronomy Before the Telescope
- ASYR 1650 Time in the Ancient World (WRIT)
- ASYR 1700 Astronomy, Divination and Politics in the Ancient World (WRIT)
- ASYR 1750 Divination in Ancient Mesopotamia (WRIT)
- ASYR 2310A Ancient Scientific Texts: Akkadian

Archaeology of Ancient Western Asia: 1
- ARCH 1200F City and the Festival: Cult Practices and Architectural Production in the Ancient Near East (WRIT)
- ARCH 1200I Material Worlds: Art and Agency in the Near East and Africa
- ARCH 1810 Under the Tower of Babel: Archaeology, Politics, and Identity in the Modern Middle East (WRIT)

Depth Requirement: At least two additional courses offered in ASYR or ARCH dealing with ancient Western Asia. These courses must be approved by the undergraduate concentration advisor.

Breadth Requirement: At least one course offered in ASYR or ARCH on the archaeology, art, history, culture, or language of ancient Egypt.

Elective: At least one elective course on the ancient world broadly defined. Usually this course will be offered in Assyriology, Anthropology, Archaeology, Classics, Comparative Literature, East Asian Studies, Egyptology, History, History of Art and Architecture, Judaic Studies, Philosophy, or Religious Studies. The elective course must be approved by the undergraduate concentration advisor.

Total Credits 10

1 This list contains possible offerings but should not be considered exhaustive.

Elective Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EGYT 1310 &amp; EGYT 1320</td>
<td>Introduction to Classical Hieroglyphic Egyptian Writing and Language (Middle Egyptian I) and Introduction to Classical Hieroglyphic Egyptian Writing and Language (Middle Egyptian II)</td>
</tr>
<tr>
<td>EGYT 1430 &amp; EGYT 1440</td>
<td>History of Egypt I and History of Egypt II</td>
</tr>
<tr>
<td>ARCH 0150</td>
<td>Introduction to Egyptian Archaeology and Art</td>
</tr>
<tr>
<td>EGYT 1420 or ARCH 1625</td>
<td>Ancient Egyptian Religion and Magic Temples and Tombs: Egyptian Religion and Culture</td>
</tr>
</tbody>
</table>

Depth Courses: 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGYT 1330</td>
<td>Selections from Middle Egyptian Hieroglyphic Texts</td>
</tr>
<tr>
<td>EGYT 1410</td>
<td>Ancient Egyptian Literature</td>
</tr>
</tbody>
</table>

Breadth Course - Any course covering the ancient Near East or Mediterranean world outside Egypt, such as:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASYR 0800</td>
<td>The Cradle of Civilization? An Introduction to the Ancient Near East</td>
</tr>
<tr>
<td>or ARCH 1600</td>
<td>Archaeologies of the Near East</td>
</tr>
</tbody>
</table>

Elective Course: Any course germane to ancient Egypt or the ancient Near East or Mediterranean world. Alternative and elective courses must be approved by the undergraduate concentration advisor. Such courses will normally be offered by Egyptology and Assyriology, the Joukowsky Institute for Archaeology and the Ancient World, Religious Studies, Classics, Judaic Studies, Anthropology, History of Art and Architecture, History, or Philosophy. Concentrators are welcome to take most courses offered by Egyptology and Assyriology (EGYT and ASYR), Archaeology (ARCH), or related departments, though some may require the instructor’s approval. Concentrators should consult with the concentration advisor to discuss the courses most suitable to their interests.

Total Credits 10

1 Required for all students pursuing the Egyptology track.
2 Or an EGYT or ARCH course in material culture.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Capstone

All concentrators in Egyptology and Assyriology are required to complete a capstone project. The project can take many forms, but the common feature shared among all possible projects will be a public presentation. Typically in the final semester before graduating, the concentrator will give this capstone presentation before faculty, fellow students, and other interested audiences. If the concentrator is writing an undergraduate honors thesis, the procedure for which is detailed below, this work should provide the content for the capstone presentation. Students not writing an honors thesis will base their presentation on a research project more in depth than a class project, though the topic may stem from a course project or paper. The format of the presentation may vary; suggestions range from an illustrated lecture to a video or an installation presented with discussion. Both the content and the format of the capstone project should be discussed with and agreed upon by the concentration advisor no later than the end of the first semester of the senior year.

Honors in Egyptology and Assyriology

1. Becoming an honors candidate

Students who wish to consider pursuing honors should meet with the Undergraduate Concentration Advisor in the first half of their sixth semester.

Eligibility is dependent on:

• Being in good standing
• Having completed at least two thirds of the concentration requirements by the end of the sixth semester.
• Having earned two-thirds "quality grades" in courses counted towards the concentration. A "quality grade" is defined as a grade of "A" or a grade of "S" accompanied by a course performance report indicating a performance at the "A" standard.

To pursue honors candidacy, eligible students must:

• Secure a faculty advisor and discuss plans for the proposed thesis project well before the established deadline; this can be done by email when a student is abroad.
• Prepare a thesis prospectus (see below).
• Submit the prospectus to the advisor, one other proposed faculty reader (at least one of the readers must be in the department) and the department chair no later than the first week of the seventh semester.

The structure of a thesis prospectus:

An honors thesis in Egyptology or Assyriology is a substantial piece of research with some degree of originality that demonstrates the student's ability to frame an appropriate question and deal critically with the range of original and secondary sources. A thesis prospectus is a short analytical document consisting of several parts. It will normally include a concise and focused research question; a justification for that question that demonstrates familiarity with previous research on the topic; a project description that includes a discussion of the types of evidence available and appropriate to answering the proposed question; a discussion of methods of collecting and analyzing that evidence; a conclusion that returns to the research question and assures the reader that the project will add value to our understanding of the topic; and a bibliography. The prospectus will ordinarily be in the range of 5-7 pages in length, exclusive of bibliography. The prospectus will include proper citations throughout.

Determination of whether or not a student may pursue the proposed project will be made on review of the prospectus by the readers and department chair. Prospectuses will be evaluated on the following scale:

1. No concerns about the viability of the project.
2. No concerns about the viability of the project, but minor weaknesses in the execution of the prospectus.
3. Concerns about the viability of the project, but willingness to reevaluate a revised prospectus submitted within two weeks of receipt of evaluation.
4. Reservations that the prospectus does not describe an honors-worthy project.
5. Poorly conceived and shoddy work.

Prospectuses will be returned to the student with this numerical evaluation and comments one week after submission of the prospectus. A prospectus must receive an evaluation of 1 or 2 prior to the third week of the seventh semester for a student to be admitted to the honors track. Students who submit an original prospectus that is graded 4 or 5 will not be permitted to rework the prospectus for the second submission.

2. Developing, completing and submitting the honors project

Once accepted as honors candidates, students will pursue a course of study that goes beyond what is expected of a regular concentrator. This includes:

• Enrollment in two semesters of independent study in Egyptology or Assyriology (these do not fulfill course requirements towards the concentration).
• Twice-monthly meetings with the thesis advisor and once-monthly meetings with the second reader. These meetings will be scheduled at the beginning of each term.
• Submission of a comprehensive outline to both readers no later than October 15 (for May graduates).
• Regular submission of drafts. A partial draft including a complete version of at least one chapter or section is due before Reading Period of the seventh semester.
• A complete draft is due to both readers no later than March 15 (for May graduates).
• The revised final thesis is due in both electronic and physical form to both readers and department chair April 5 (for May graduates).

Failure to meet any deadline will result in automatic termination of the honors process. No extensions will be granted. If a thesis is turned in late but before the end of the term, credit and grade for the Independent Study may still be granted.

3. Evaluating the submitted work of honors candidates

In order to receive honors a student must be found to have:

• Remained in good academic standing throughout the academic year.
• Not violated the Academic Code of Conduct during honors candidacy.
• Complete or be about to complete all concentration requirements.
• Produced a thesis that is judged by the readers to meet the department's expectations for honors work (see below), and turned it in by the established deadlines.
• Successfully defended the thesis during a half hour public presentation held during the final exam period of the eighth semester.

Students who submit theses that are deemed to fall short of the expectations will graduate without honors. In that case, the theses will count as a capstone project.

4. Expectations for honors theses:

Originality:

An honors thesis in Egyptology or Assyriology is expected to add to existing scholarship. The thesis must be based on close work with primary sources (usually in publication rather than in person), supplemented by critical engagement with a substantial amount of relevant secondary literature. While the resulting study is not necessarily expected to be ground-breaking or original, and may engage with a well-studied topic, it will usually include a new insight into or interpretation of the material considered.

Scope:

An honors thesis is not a book or dissertation. It is, however, a very serious piece of research and writing for which two dedicated study courses have provided substantial time to the honors student. The question upon which the honors thesis is based should be focused enough to allow an in-depth treatment, generally in under 100 pages or 30,000 words (exclusive of bibliography and illustrations). Appropriate length will vary considerably depending on the topic itself and the nature of the primary sources being considered, particularly if substantial translation of ancient textual sources is required.

Argument:

The thesis should present a sustained analytic argument in answer to its structuring question. A thesis should not be primarily descriptive or narrative in nature. Each chapter should contain a sub-argument that is clearly related to the overall argument of the thesis. The significance of the argument and its relationship to prior scholarship should be clearly articulated. Honors theses are not expected to demonstrate

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comprehensive familiarity with the secondary literature, but they are expected to engage critically and maturely with important works on the defined topic.

Methodology:
Egyptology and Assyriology are very broad fields, and the appropriate methods will be determined in conjunction with the thesis advisor on the basis of the questions and types of evidence - textual, archaeological, art historical - under consideration. With very few exceptions the methodology of the thesis is expected to be conventional rather than innovative, rooted in the accepted practices of the field in question.

Organization and writing:
An honors thesis must be well organized and written. It should include an introduction and conclusion as well as well-considered chapters that allow the reader to follow the line of reasoning easily. The relationship of any section to the larger whole should be clear, and seques should help the reader move between sections. Writing should be grammatically correct, well copy-edited, professional, and consistent. Citations and bibliography must be in an accepted style as determined in consultation with the advisor.

Engineering
The concentration in Engineering equips students with a solid foundation for careers in engineering, to advance the knowledge base for future technologies, and to merge teaching, scholarship, and practice in the pursuit of solutions to human needs. The concentration offers one standard Bachelor of Arts (A.B.) program and nine Bachelor of Science (Sc.B.) degree program tracks. Of these, seven Sc.B. programs in biomedical, chemical and biochemical, civil, through May 2016, computer, electrical, materials, and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/. Sc.B. degree programs in environmental engineering and engineering physics are also offered, but they are not accredited by ABET.

(Note: The civil track has been discontinued for all students entering after fall 2012. Students interested in structural engineering entering in the class of 2017 and beyond may pursue a Structures track within the Mechanical Engineering program.) Other programs leading to the Sc.B. or A.B. degrees in Engineering may be designed in consultation with a faculty advisor. These programs must meet the general requirements for concentration programs in the School of Engineering. Students interested in an individualized program should consult with an Engineering faculty member willing to serve as an advisor and obtain the approval of the Engineering Concentration Committee. Engineering students with a particular interest in using their technical skills for the public benefit might also consider the Engaged Scholars Program (https://www.brown.edu/academics/engineering/undergraduate-study/engaged-scholars-program).

Please note that all student concentration forms must be approved by the Engineering Concentration Committee, which reviews them for compliance with all relevant program and accreditation requirements.

Mathematics
Mathematics 0190, 0200 is the preferred sequence of courses to be taken in the freshman year. Students with weak preparation in calculus may start in MATH 0100 and take MATH 0200 in their second semester. Students without one year of secondary school level preparation in calculus should take MATH 0090, MATH 0100 in their first year, and should begin their sequence of engineering courses with ENGN 0030 in sophomore year. The courses APMA 0330 & APMA 0340 (Methods of Applied Math I, II) can be taken in the sophomore year as well.

Advanced Placement
Students who have taken Advanced Placement courses in high school and/or have shown proficiency through advanced placement examinations are often able to start at a higher level than suggested by the standard programs below. However, please note that Advanced Placement credit cannot be used to satisfy any concentration requirements. For example, our Sc.B. programs specify that students must take 4 semesters of math while enrolled here at Brown, beginning with MATH 0190 or MATH 0170. If a student comes in with advanced placement credit (e.g. placing out of MATH 0190 or MATH 0200), he/she is strongly recommended to take a higher level math course as a replacement. Examples of such courses are MATH 0520 (Linear Algebra), MATH 1260 (Complex Analysis), MATH 1610 (Probability), MATH 1620 (Statistics), APMA 1170 (Numerical Analysis), APMA 1210 (Operations Research), or APMA 1650 (Statistical Inference). However, the student with advanced placement credit for MATH 0190 or MATH 0200 also has the option of replacing the math course with an advanced-level science course, subject to the approval of the concentration advisor.

Transfer Credit
Students who have successfully completed college courses elsewhere may apply to the University for transfer credit. (See the "Study Elsewhere" section of the University Bulletin for procedures, or contact the Dean of the College.) Transfer courses that are used to meet Engineering concentration requirements must be approved by the student’s concentration advisor, and must be described briefly on the student’s electronic concentration form. Transfer courses that are determined by the concentration advisor to be substantially equivalent to a required Brown course automatically fulfill concentration requirements. In rare cases, students may petition the concentration committee to use courses that do not have an equivalent offered at Brown to meet a concentration requirement. Substitutions of this nature can only be approved if the student’s overall program meets published educational outcomes for the concentration and has sufficient basic science, mathematics, and engineering topics courses to meet relevant accreditation requirements. Students should consult their concentration advisor for assistance with drafting a petition. The decision whether to award concentration credit is made by majority vote of the Engineering Concentration Committee.

Substitutions for Required Courses
In exceptional circumstances, a student may petition the concentration committee to substitute a course in place of a requirement. Such substitutions can only be approved if the student’s modified program continues to meet the published educational outcomes for the concentration, and has sufficient basic science, mathematics, and engineering topics courses to meet accreditation requirements. Students wishing to make substitutions of this nature should consult their concentration advisor for assistance with drafting their petition. Approval of the petition is subject to majority vote of the Engineering Concentration Committee.

Standard Program for the A.B. degree:
Candidates for the Bachelor of Arts (A.B.) degree with a concentration in Engineering must complete at least eight approved Engineering courses. The eight courses must include at least two 1000-level Engineering courses. Of these 1000-level courses, one must be a design or independent study course and the other an in-classroom experience. The set of Engineering courses must be chosen with careful attention to the prerequisites of the 1000-level courses. Please note that this A.B. degree program is not accredited by ABET.

Not all engineering courses may be used to satisfy the engineering course requirement for the A.B. degree. For example, the following courses cannot be used to satisfy the engineering course requirement for the A.B. degree: ENGN 0020, ENGN 0090, ENGN 0900, ENGN 0930A, ENGN 0930C, ENGN 1010. Therefore, the program of study must be developed through consultation with the concentration advisor.

The A.B. program also requires preparation in Mathematics equivalent to MATH 0200 and APMA 0330, as well as at least one college-level science course from the general areas of chemistry, life sciences, physics, or geological sciences. Remedial courses, such as CHEM 0100, cannot be used to satisfy this requirement. A programming course is also recommended, but not required. The entire program is subject to approval by an Engineering Concentration Advisor and the Chair of the Engineering Concentration Committee.

Standard programs for the Sc.B. degree
All Bachelor of Science (Sc.B.) program tracks build upon a common core of engineering knowledge and skills applicable across all engineering disciplines. The goal of this engineering core curriculum is to prepared to practice engineering in an age of rapidly changing technology. Two-
thirds of this four-year program consists of a core of basic mathematics, physical sciences and engineering sciences common to all branches of engineering, including a thorough grounding in programming and technical problem solving. This core provides our graduates with the basis of theory, design, and analysis that will enable them to adapt to whatever may come along during their careers.

At the same time, the core courses assist students in making informed choices in determining their areas of specialization, at the end of their sophomore year. To this end, first-year students are given an introduction to engineering - featuring case studies from different disciplines in engineering as well as guest speakers from industry. This aspect of the program is different from that at many other schools where students are expected to select a specific branch of engineering much earlier in their academic program.

In addition, all Sc.B. programs in Engineering must be complemented by at least four courses in humanities and social sciences. The minimum four-course humanities and social sciences requirement for the Sc.B. in Engineering cannot be met by advanced placement credit.

Special Concentrations

In addition to the standard programs described above, students may also petition the Engineering Concentration Committee to pursue a special engineering Sc.B. degree of their own design. Such special Sc.B. programs are not ABET-acccredited. Students with a special concentration will receive an Sc.B. degree in engineering, but a specific area of specialization will not be noted on their transcript. A special Sc.B. concentration is intended to prepare graduates for advanced study in engineering or for professional practice, but in an area that is not covered by one of the existing Sc.B. programs. Accordingly, special concentration programs are expected to consist of a coherent set of courses with breadth, depth and rigor comparable to an accredited degree. A total of 21 engineering, mathematics, and basic science courses are required. The program must include at least 3 courses in mathematics, at least 2 courses in physical or life sciences; and at least 12 courses in engineering. At least five of the engineering courses must be upper level courses, and one must be a capstone design course or independent study, which must be advised or co-advised by a member of the regular engineering faculty. Note that not all engineering courses may be used to meet Sc.B. requirements: for example, the courses not allowed to count toward the A.B., will not qualify. Petitions should be prepared in consultation with an engineering faculty adviser, who will submit the petition to the Engineering Concentration Committee. Petitions must include: (i) a statement of the objectives of the degree program, and an explanation of how the courses in the program meet these objectives; (ii) course descriptions for any courses in the program that are not part of standard Sc.B. engineering concentrations; (iii) a detailed description of any independent study courses used for concentration credit, signed by the faculty adviser for this course; and (iv) an up-to-date internal transcript.

Chemical and Biochemical Engineering Track:

The Chemical and Biochemical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The education objectives of the Chemical and Biochemical Engineering program are to prepare graduates: (1) to pursue productive scientific and technical careers, beginning with entry-level engineering positions in industry, or graduate study in chemical or biochemical engineering or related fields; or to successfully pursue other careers that benefit from the analytical or quantitative skills acquired through the Brown CBE Program; (2) to effectively apply the principles of chemical and biochemical engineering, problem-solving skills, and critical and independent thinking, to a broad range of complex, multidisciplinary technological and societal problems; (3) to communicate effectively, both orally and in writing, to professionals and audiences of diverse backgrounds, and to pursue technical approaches and innovations that address the needs of society in an ethical, safe, sustainable, and environmentally responsible manner. The student outcomes of this program are the ABET (a) - (k) Student Outcomes as defined by the "ABET Criteria for Accrediting Engineering Programs" (available online at http://www.abet.org/accreditation-criteria-policies-documents/).

1. Core Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Dynamics and Vibrations</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0410</td>
<td>Materials Science</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0520</td>
<td>Electrical Circuits and Signals</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0720</td>
<td>Thermodynamics</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0810</td>
<td>Fluid Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>BIOI 0200</td>
<td>The Foundation of Living Systems</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/ Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/ Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0180</td>
<td>Intermediate Calculus</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0350</td>
<td>Honors Calculus</td>
<td>1</td>
</tr>
<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
<td>1</td>
</tr>
<tr>
<td>APMA 0340</td>
<td>Methods of Applied Mathematics I, II</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 0360</td>
<td>Applied Partial Differential Equations</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Upper-Level Chemical & Biochemical Engineering Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1110</td>
<td>Transport and Biotransport Processes</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1120</td>
<td>Chemical and Biochemical Reactor Design</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1130</td>
<td>Phase and Chemical Equilibria</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1710</td>
<td>Heat and Mass Transfer</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>Advanced Chemistry elective course *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 0400</td>
<td>Biophysical and Bioinorganic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 0500</td>
<td>Inorganic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>Advanced Natural Sciences elective course $</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Capstone Design Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1140</td>
<td>Chemical Process Design</td>
<td>1</td>
</tr>
</tbody>
</table>

*In addition to program requirements above, students must take four courses in the humanities and social sciences.

Total Credits: 21

1 Note: ENGN 1120 and 1130 are only offered in alternate years.
2 An advanced chemistry course approved by concentration advisor; the following courses are pre-approved for this requirement.
3 An advanced course in the natural sciences approved by the concentration advisor. For suggestions of acceptable courses that fulfill this requirement, please see the concentration advisor.

Civil Engineering Track (Available to students entering Brown on or before the Fall of 2012):

Important Announcement: Civil Engineering program will continue through May 2016, and will be available to all students currently enrolled at Brown, including those who arrived as Freshmen in the Fall of 2012 (the class of 2016). Students entering in the class of 2017 and later, with interest in Structural Engineering will be able to concentrate in this discipline through a Structures track within the Mechanical Engineering program. Students interested in Environmental Problems and Planning are directed to the programs in Chemical and Biochemical Engineering or Environmental Engineering.

The Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The education objectives of the Civil Engineering program are to prepare graduates: (1) to have distinctive careers, beginning with either entry level positions in structural and environmental areas of civil engineering or graduate study in these fields; (2) to adapt to changing opportunities, both in
engineering and in other professional and business pursuits; (3) to be ethically responsible, to engage in lifelong learning, and to be of service to the engineering community and to society at large. The student outcomes of this program are the ABET (a) - (k) Student Outcomes as defined by the "ABET Criteria for Accrediting Engineering Programs" (available online at http://www.abet.org/accreditation-criteria-policies-documents/).

1. Core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0300</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Dynamics and Vibrations</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0310</td>
<td>Mechanics of Solids and Structures</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0410</td>
<td>Materials Science</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0520</td>
<td>Electrical Circuits and Signals</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0720</td>
<td>Thermodynamics</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0810</td>
<td>Fluid Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/ Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/ Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0180</td>
<td>Intermediate Calculus</td>
<td></td>
</tr>
<tr>
<td>or MATH 0350</td>
<td>Honors Calculus</td>
<td></td>
</tr>
<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
<td></td>
</tr>
<tr>
<td>APMA 0340</td>
<td>Methods of Applied Mathematics I, II</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 0360</td>
<td>Applied Partial Differential Equations</td>
<td></td>
</tr>
<tr>
<td>CSCI 0040</td>
<td>Introduction to Scientific Computing and Problem Solving</td>
<td>1</td>
</tr>
<tr>
<td>or CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0190</td>
<td>Accelerated Introduction to Computer Science</td>
<td></td>
</tr>
</tbody>
</table>

2. Upper-Level Civil Engineering Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1300</td>
<td>Structural Analysis</td>
<td></td>
</tr>
<tr>
<td>ENGN 1340</td>
<td>Water Supply and Wastewater Treatment</td>
<td></td>
</tr>
<tr>
<td>ENGN 1360</td>
<td>Soil Mechanics and Principles of Foundation Engineering</td>
<td></td>
</tr>
<tr>
<td>GEOL 1330</td>
<td>Global Environmental Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>or GEOL 1580</td>
<td>Quantitative Elements of Physical Hydrology</td>
<td></td>
</tr>
<tr>
<td>or GEOL 1590</td>
<td>Quantitative Modeling of Hydrologic Processes</td>
<td></td>
</tr>
</tbody>
</table>

3. Civil Engineering Specialty Options (Complete one of the following two course specialty sequences)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1380</td>
<td>Design of Civil Engineering Structures</td>
<td></td>
</tr>
<tr>
<td>ENGN 1310</td>
<td>Planning and Design of Systems</td>
<td></td>
</tr>
<tr>
<td>or ENGN 1370</td>
<td>Advanced Engineering Mechanics</td>
<td></td>
</tr>
<tr>
<td>or ENGN 1740</td>
<td>Computer Aided Visualization and Design</td>
<td></td>
</tr>
<tr>
<td>or ENGN 1750</td>
<td>Advanced Mechanics of Solids</td>
<td></td>
</tr>
<tr>
<td>or ENGN 1860</td>
<td>Advanced Fluid Mechanics</td>
<td></td>
</tr>
<tr>
<td>ENGN 1310</td>
<td>Planning and Design of Systems</td>
<td></td>
</tr>
</tbody>
</table>

2. Environmental Problems

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1130</td>
<td>Phase and Chemical Equilibria</td>
<td></td>
</tr>
<tr>
<td>ENGN 1310</td>
<td>Planning and Design of Systems</td>
<td></td>
</tr>
</tbody>
</table>

3. Capstone Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1930D</td>
<td>Large Scale Engineering Design Project</td>
<td>1</td>
</tr>
</tbody>
</table>

*In addition to program requirements above, students must take four courses in the humanities and social sciences.

Total Credits: 21

---

Computer Engineering Track:

The Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The education objectives of the Computer Engineering program are to prepare graduates: (1) to pursue distinctive multidisciplinary scientific and technical careers beginning with either entry-level computer engineering positions in industry or graduate study in computer engineering and related fields; (2) to participate on multidisciplinary teams that cooperate in applying problem-solving skills and critical and independent thinking to a broad range of projects that can produce the technical innovations aimed at satisfying the future needs of society. The student outcomes of this program are the ABET (a) - (k) Student Outcomes as defined by the "ABET Criteria for Accrediting Engineering Programs" (available online at http://www.abet.org/accreditation-criteria-policies-documents/).

The Computer Engineering concentration shares much of the core with the other engineering programs, but is structured to include more courses in computer science, and a somewhat different emphasis in mathematics.

1. Core Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Dynamics and Vibrations</td>
<td></td>
</tr>
<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
<td></td>
</tr>
<tr>
<td>ENGN 0520</td>
<td>Electrical Circuits and Signals</td>
<td></td>
</tr>
<tr>
<td>APMA 1650</td>
<td>Statistical Inference I</td>
<td></td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/ Engineering)</td>
<td></td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/ Engineering)</td>
<td></td>
</tr>
<tr>
<td>or MATH 0180</td>
<td>Intermediate Calculus</td>
<td></td>
</tr>
<tr>
<td>or MATH 0350</td>
<td>Honors Calculus</td>
<td></td>
</tr>
<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
<td></td>
</tr>
<tr>
<td>or APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
<td></td>
</tr>
<tr>
<td>APMA 0340</td>
<td>Methods of Applied Mathematics I, II</td>
<td></td>
</tr>
<tr>
<td>or APMA 0360</td>
<td>Applied Partial Differential Equations</td>
<td></td>
</tr>
<tr>
<td>CSCI 0040</td>
<td>Introduction to Scientific Computing and Problem Solving</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0190</td>
<td>Accelerated Introduction to Computer Science</td>
<td></td>
</tr>
</tbody>
</table>

2. Advanced Core:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>or MATH 0540</td>
<td>Honors Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>CSCI 0330</td>
<td>Introduction to Computer Systems</td>
<td></td>
</tr>
<tr>
<td>ENGN 1570</td>
<td>Linear System Analysis</td>
<td></td>
</tr>
<tr>
<td>ENGN 1630</td>
<td>Digital Electronics Systems Design</td>
<td></td>
</tr>
</tbody>
</table>

3. Specialty Courses: (Complete one of the following 5-course specialty sequences)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
<td></td>
</tr>
<tr>
<td>&amp; CSCI 0160</td>
<td>and Introduction to Algorithms and Data Structures</td>
<td></td>
</tr>
<tr>
<td>CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
<td></td>
</tr>
<tr>
<td>&amp; CSCI 0180</td>
<td>and Computer Science: An Integrated Introduction</td>
<td></td>
</tr>
<tr>
<td>CSCI 0190</td>
<td>Accelerated Introduction to Computer Science ( and one additional CSCI course subject to approval)</td>
<td></td>
</tr>
</tbody>
</table>

3a. For the Computer Specialty:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1620</td>
<td>Analysis and Design of Electronic Circuits</td>
<td></td>
</tr>
<tr>
<td>ENGN 1640</td>
<td>Design of Computing Systems</td>
<td></td>
</tr>
<tr>
<td>Select one of the following (other ENGN courses subject to approval):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGN 1580</td>
<td>Communication Systems</td>
<td></td>
</tr>
<tr>
<td>ENGN 1600</td>
<td>Design and Implementation of Very Large-Scale Integrated Systems</td>
<td></td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ENGN 1650  Embedded Microprocessor Design
ENGN 1680  Design and Fabrication of Semiconductor Devices
ENGN 2910A  Advanced Computer Architecture
ENGN 2912E  Low Power VLSI System Design
ENGN 2911X  Reconfigurable Computing

Select two of the following (other CSCI courses subject to approval):

CSCI 0320  Introduction to Software Engineering
CSCI 1230  Introduction to Computer Graphics
CSCI 1270  Database Management Systems
CSCI 1380  Distributed Computer Systems
CSCI 1410  Artificial Intelligence
CSCI 1480  Building Intelligent Robots
CSCI 1570  Design and Analysis of Algorithms
CSCI 1670  Operating Systems
CSCI 1680  Computer Networks
CSCI 1730  Design and Implementation of Programming Languages
CSCI 1760  Multiprocessor Synchronization
CSCI 1900  csciStartup

3b. For the multimedia Signal Processing Specialty:

APMA 1170  Introduction to Computational Linear Algebra

Select two or three of the following (other ENGN courses subject to approval):

ENGN 1580  Communication Systems
ENGN 1610  Image Understanding
ENGN 2500  Medical Image Analysis
ENGN 2520  Pattern Recognition and Machine Learning
ENGN 2530  Digital Signal Processing
ENGN 2560  Computer Vision

Select one or two of the following (other CSCI courses subject to approval):

CSCI 0320  Introduction to Software Engineering
CSCI 1230  Introduction to Computer Graphics
CSCI 1290  Computational Photography
CSCI 1410  Artificial Intelligence
CSCI 1420  Machine Learning
CSCI 1430  Computer Vision
CSCI 1460  Computational Linguistics
CSCI 1570  Design and Analysis of Algorithms

4. Capstone Design

ENGN 1650  Embedded Microprocessor Design

* In addition to program requirements above, students must take four courses in the humanities and social sciences.

Total Credits 21

1 Student should consult with concentration advisor for recommendation and approval.

2 Subject to approval by the concentration advisor, an independent study course (ENGN1970/1971) may be used to fulfill the Engineering Capstone Design requirement. To qualify for such approval, the independent study project must: (1) contain a significant and definable design component; (2) be based on the knowledge and skills acquired in earlier course work, (3) incorporate appropriate engineering standards; and (4) address multiple realistic constraints. To request approval, please complete the online form available at: http://www.brown.edu/academics/engineering/undergraduate-study.

Electrical Engineering Track:

The Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The education objectives of the Electrical Engineering program are to prepare graduates: (1) to pursue distinctive multidisciplinary scientific and technical careers beginning with either entry-level electrical engineering positions in industry or graduate study in electrical engineering and related fields; (2) to participate on multidisciplinary teams that cooperate in applying problem-solving skills and critical and independent thinking to a broad range of projects that can produce the technical innovations aimed at satisfying the future needs of society. The student outcomes of this program are the ABET (a) - (k) Student Outcomes as defined by the "ABET Criteria for Accrediting Engineering Programs" (available online at http://www.abet.org/accreditation-criteria-policies-documents/).

1. Core Courses:

ENGN 0030  Introduction to Engineering 1
ENGN 0040  Dynamics and Vibrations 1
ENGN 0410  Materials Science 1
ENGN 0510  Electricity and Magnetism 1
ENGN 0520  Electrical Circuits and Signals 1
ENGN 0720  Thermodynamics 1
ENGN 0310  Mechanics of Solids and Structures 1
or ENGN 0810  Fluid Mechanics
CHEM 0330  Equilibrium, Rate, and Structure 1
MATH 0190  Advanced Placement Calculus (Physics/Engineering) 1
or MATH 0170  Advanced Placement Calculus 1
MATH 0200  Intermediate Calculus (Physics/Engineering) 1
or MATH 0180  Intermediate Calculus 1
or MATH 0350  Honors Calculus 1
APMA 0330  Methods of Applied Mathematics I, II 1
or APMA 0350  Applied Ordinary Differential Equations 1
APMA 0340  Methods of Applied Mathematics I, II 1
or APMA 0360  Applied Partial Differential Equations I
CSCI 0150  Introduction to Object-Oriented Programming and Computer Science 1
or CSCI 0040  Introduction to Scientific Computing and Problem Solving 1
or CSCI 0170  Computer Science: An Integrated Introduction 1
or CSCI 0190  Accelerated Introduction to Computer Science 1

2. Upper-Level Electrical Engineering Curriculum 4

ENGN 1570  Linear System Analysis
ENGN 1620  Analysis and Design of Electronic Circuits
ENGN 1630  Digital Electronics Systems Design
PHYS 0790  Physics of Matter 1
or PHYS 1410  Quantum Mechanics A

3. Electrical Engineering Specialty Option: (Complete one of the following 3-course specialty sequences) 3

3a. Bioelectrical Engineering

ENGN 1230; and one of (ENGN 1220, ENGN 1930B, ENGN 2500 or ENGN 2912L); and one additional course from the following: (ENGN 1220, ENGN 1610, ENGN 1930B, ENGN 2500, ENGN 2912L, CLPS 1491, CLPS 1525, NEUR 1680, or NEUR 2110).

3b. Communication Systems

ENGN 1580; and (ENGN 1560 or ENGN 1690); and one additional course from the following (ENGN 1560, ENGN 1610, ENGN 1640, ENGN 1650, ENGN 1690, or ENGN 2530).

3c. Computer Engineering
Environmental Engineering Track:

The Environmental Engineering program began in 2013. The program has not been reviewed by ABET and is not ABET-accredited. The education objectives of the Environmental Engineering program are to prepare graduates: (1) to apply in practice the knowledge obtained in school within industry, government, or private practice; (2) to work toward sustainable solutions in a wide array of technical specialties; (3) to pursue lifelong learning through continuing education and/or advanced degrees in environmental engineering. The student outcomes of this program are the (a) - (k) Student Outcomes as defined by the "ABET Criteria for Accrediting Engineering Programs" (available online at http://www.brown.edu/academics/engineering/undergraduate-study).

1. Core Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Dynamics and Vibrations</td>
</tr>
<tr>
<td>ENGN 0410</td>
<td>Materials Science</td>
</tr>
<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
</tr>
<tr>
<td>ENGN 0720</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>ENGN 0810</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
</tr>
<tr>
<td>ENVS 0490</td>
<td>Environmental Science in a Changing World</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/Engineering)</td>
</tr>
<tr>
<td>or MATH 0180</td>
<td>Intermediate Calculus</td>
</tr>
<tr>
<td>or MATH 0350</td>
<td>Honors Calculus</td>
</tr>
<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
</tr>
<tr>
<td>or APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
</tr>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
</tr>
<tr>
<td>or APMA 1650</td>
<td>Statistical Inference I</td>
</tr>
</tbody>
</table>

2. Advance Science Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>GEOL 1370</td>
<td>Environmental Geochemistry</td>
</tr>
<tr>
<td>or GEOL 1580</td>
<td>Quantitative Elements of Physical Hydrology</td>
</tr>
<tr>
<td>BIOL 0415</td>
<td>Microbes in the Environment (or an approved alternative Natural Science Course)</td>
</tr>
<tr>
<td>or BIOL 0420</td>
<td>Principles of Ecology</td>
</tr>
</tbody>
</table>

3. Environmental Engineering Specialty Options (Complete one of the following five course sequences)

3a. Chemistry Specialty

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0310</td>
<td>Mechanics of Solids and Structures</td>
</tr>
<tr>
<td>or ENGN 0520</td>
<td>Electrical Circuits and Signals</td>
</tr>
</tbody>
</table>

4. Capstone Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGV 1000</td>
<td>Projects in Engineering Design</td>
</tr>
<tr>
<td>or ENGV 1140</td>
<td>Chemical Process Design</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Materials Engineering Track:
The Materials Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The education objectives of the Materials Engineering program are to prepare graduates: (1) to pursue multidisciplinary scientific and technical careers beginning with entry-level engineering positions in industry or graduate study in materials science and engineering and related fields; (2) to apply an engineering problem-solving approach combined with a broad appreciation for the liberal arts to inform and develop their understanding of current societal needs and values to achieve leadership positions in their chosen fields of endeavor. The student outcomes of this program are the (a) - (k) Student Outcomes as defined by the “ABET Criteria for Accrediting Engineering Programs” (available online at http://www.abet.org/accreditation-criteria-policies-documents/).

1. Core Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Dynamics and Vibrations</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0410</td>
<td>Materials Science</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0520</td>
<td>Circuit and Signals</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0720</td>
<td>Thermodynamics</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0310</td>
<td>Mechanics of Solids and Structures</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 0810</td>
<td>Fluid Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Engineering)</td>
<td></td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/Engineering)</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0180</td>
<td>Intermediate Calculus</td>
<td></td>
</tr>
<tr>
<td>or MATH 0350</td>
<td>Honors Calculus</td>
<td></td>
</tr>
<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 0350</td>
<td>Applied Ordinary Differential Equations</td>
<td></td>
</tr>
<tr>
<td>APMA 0340</td>
<td>Methods of Applied Mathematics I, II</td>
<td>1</td>
</tr>
<tr>
<td>or APMA 0360</td>
<td>Applied Partial Differential Equations I</td>
<td></td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>or CSCI 0040</td>
<td>Introduction to Scientific Computing and Problem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solving</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
<td></td>
</tr>
<tr>
<td>or CSCI 0190</td>
<td>Accelerated Introduction to Computer Science</td>
<td></td>
</tr>
</tbody>
</table>

2. Upper-Level Materials Engineering Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1410</td>
<td>Physical Chemistry of Solids</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1420</td>
<td>Kinetics Processes in Materials Science and</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGN 1440</td>
<td>Mechanical Properties of Materials</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0790</td>
<td>Physics of Matter</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
<td></td>
</tr>
</tbody>
</table>

Three of the following: 1

1. Core Courses (continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1450</td>
<td>Properties and Processing of Electronic Materials</td>
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</tr>
<tr>
<td>ENGN 1470</td>
<td>Structure and Properties of Nonmetallic Materials</td>
<td></td>
</tr>
<tr>
<td>ENGN 1480</td>
<td>Metallic Materials</td>
<td></td>
</tr>
<tr>
<td>ENGN 1490</td>
<td>Biomaterials</td>
<td></td>
</tr>
</tbody>
</table>

3. Capstone Design 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1000</td>
<td>Projects in Engineering Design</td>
<td>1</td>
</tr>
</tbody>
</table>

* In addition to program requirements above, students must take four courses in the humanities and social sciences.

Total Credits 21

1 Subject to approval by the concentration advisor, an independent study course (ENGN0790/1971) may be used to fulfill the Engineering Capstone Design requirement. To qualify for such approval, the independent study project must: (1) contain a significant and definable design component; (2) be based on the knowledge and skills acquired in earlier course work, (3) incorporate appropriate engineering standards; and (4) address multiple realistic constraints. To request approval, please complete the online form available at: http://www.brown.edu/academics/engineering/undergraduate-study

Mechanical Engineering Track:
The Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The education objectives of the Mechanical Engineering program are to prepare graduates: (1) to pursue scientific and technical careers beginning with either graduate study in mechanical engineering and related fields or mechanical engineering positions in industry; (2) to work on interdisciplinary teams that make use of the engineering problem solving method and a broad background in the liberal arts to address societal needs. The student outcomes of this program are the (a) - (k) Student Outcomes as defined by the “ABET Criteria for Accrediting Engineering Programs” (available online at http://www.abet.org/accreditation-criteria-policies-documents/).

1. Core Courses:

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<td>Introduction to Engineering</td>
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<td>Dynamics and Vibrations</td>
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<td>ENGN 0310</td>
<td>Mechanics of Solids and Structures</td>
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<td>ENGN 0410</td>
<td>Materials Science</td>
<td>1</td>
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<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
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<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
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<tr>
<td>or CSCI 0190</td>
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2. Upper-Level Materials Engineering Curriculum

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<tr>
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<th>Course Title</th>
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</tr>
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<tbody>
<tr>
<td>ENGN 1410</td>
<td>Physical Chemistry of Solids</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1420</td>
<td>Kinetics Processes in Materials Science and</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGN 1440</td>
<td>Mechanical Properties of Materials</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0790</td>
<td>Physics of Matter</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 1140</td>
<td>Physical Chemistry: Quantum Chemistry</td>
<td></td>
</tr>
</tbody>
</table>

Three of the following: 1

1. Core Courses (continued)

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<tr>
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<tbody>
<tr>
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<td>Properties and Processing of Electronic Materials</td>
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</tr>
<tr>
<td>ENGN 1470</td>
<td>Structure and Properties of Nonmetallic Materials</td>
<td></td>
</tr>
<tr>
<td>ENGN 1480</td>
<td>Metallic Materials</td>
<td></td>
</tr>
<tr>
<td>ENGN 1490</td>
<td>Biomaterials</td>
<td></td>
</tr>
</tbody>
</table>

3. Capstone Design 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 1000</td>
<td>Projects in Engineering Design</td>
<td>1</td>
</tr>
</tbody>
</table>

* In addition to program requirements above, students must take four courses in the humanities and social sciences.

Total Credits 21

1 These courses are taken in either the junior or senior year. Note that ENGN 1470 is offered on a rotating basis in the fall semester of alternate years, and ENGN 1480 and ENGN 1450 are offered in the spring semester of alternate years.

2 Subject to approval by the concentration advisor, an independent study course (ENGN1970/1971) may be used to fulfill the Engineering Capstone Design requirement. To qualify for such approval, the independent study project must: (1) contain a significant and definable design component; (2) be based on the knowledge and skills acquired in earlier course work, (3) incorporate appropriate engineering standards; and (4) address multiple realistic constraints. To request approval, please complete the online form available at: http://www.brown.edu/academics/engineering/undergraduate-study

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
or CSCI 0170  Computer Science: An Integrated Introduction
or CSCI 0190  Accelerated Introduction to Computer Science

2. Upper-Level Mechanical Engineering Curriculum

Specialty Options (Complete one of the following seven course specialty sequences)

2a. Aerospace Applications

PHYS 0790  Physics of Matter
ENGN 1370  Advanced Engineering Mechanics
ENGN 1700  Jet Engines and Aerospace Propulsion
ENGN 1720  Design of Thermal Engines
or ENGN 1760  Design of Space Systems
ENGN 1860  Advanced Fluid Mechanics

One of the following:

ENGN 1710  Heat and Mass Transfer
or ENGN 1300  Structural Analysis
or ENGN 1740  Computer Aided Visualization and Design
or ENGN 1750  Advanced Mechanics of Solids

Capstone Design

ENGN 1000  Projects in Engineering Design
or ENGN 1930M  Industrial Design
or ENGN 1931D  Design of Mechanical Assemblies

2b. Biomechanics

BIOC 0800  Principles of Physiology
ENGN 1210  Biomechanics
ENGN 1230  Instrumentation Design
ENGN 1370  Advanced Engineering Mechanics

One of the following courses:

ENGN 1700  Jet Engines and Aerospace Propulsion
or ENGN 1710  Heat and Mass Transfer
or ENGN 1860  Advanced Fluid Mechanics

One of the following course:

ENGN 1220  Neuroengineering
or ENGN 1300  Structural Analysis
or ENGN 1490  Biomaterials
or ENGN 1740  Computer Aided Visualization and Design
or ENGN 1750  Advanced Mechanics of Solids

Capstone Design

ENGN 1000  Projects in Engineering Design
or ENGN 1930M  Industrial Design
or ENGN 1931D  Design of Mechanical Assemblies

2c. Energy Conversion: Fluids and Thermal Systems

PHYS 0790  Physics of Matter
ENGN 1700  Jet Engines and Aerospace Propulsion
ENGN 1710  Heat and Mass Transfer
ENGN 1720  Design of Thermal Engines
ENGN 1860  Advanced Fluid Mechanics

One of the following courses:

ENGN 1750  Advanced Mechanics of Solids
or ENGN 1300  Structural Analysis
or ENGN 1370  Advanced Engineering Mechanics

Capstone Design

ENGN 1000  Projects in Engineering Design
or ENGN 1930M  Industrial Design
or ENGN 1931D  Design of Mechanical Assemblies

2d. Engineering Mechanics

PHYS 0790  Physics of Matter
ENGN 1370  Advanced Engineering Mechanics
ENGN 1710  Heat and Mass Transfer
ENGN 1750  Advanced Mechanics of Solids

2e. Mechanical Systems: Dynamics, Materials, and Design

PHYS 0790  Physics of Matter
ENGN 1370  Advanced Engineering Mechanics
ENGN 1750  Advanced Mechanics of Solids

One of the following courses:

ENGN 1380  Design of Civil Engineering Structures
or ENGN 1720  Design of Thermal Engines
or ENGN 1760  Design of Space Systems

One or two of the following courses:

ENGN 1700  Jet Engines and Aerospace Propulsion
or ENGN 1710  Heat and Mass Transfer
or ENGN 1720  Design of Thermal Engines
or ENGN 1860  Advanced Fluid Mechanics

Capstone Design

ENGN 1000  Projects in Engineering Design
or ENGN 1930M  Industrial Design
or ENGN 1931D  Design of Mechanical Assemblies

Up to one of the following:

ENGN 1230  Instrumentation Design
or ENGN 1300  Structural Analysis
or ENGN 1380  Design of Civil Engineering Structures
or ENGN 1440  Mechanical Properties of Materials
or ENGN 1620  Analysis and Design of Electronic Circuits
or ENGN 1740  Computer Aided Visualization and Design

2f. Structural Mechanics

PHYS 0790  Physics of Matter
ENGN 1300  Advanced Engineering Mechanics
ENGN 1710  Heat and Mass Transfer
ENGN 1860  Advanced Fluid Mechanics

One of the following courses:

ENGN 1740  Computer Aided Visualization and Design
or ENGN 1750  Advanced Mechanics of Solids
or ENGN 1760  Design of Space Systems

Capstone Design

ENGN 1380  Design of Civil Engineering Structures

*In addition to program requirements above, students must take four courses in the humanities and social sciences.

Total Credits 21

1 Or another advanced science course, subject to concentration advisor approval.
Subject to approval by the concentration advisor, an independent study course (ENGN 1970/ENGN 1971) may be used to fulfill the Engineering Capstone Design requirement. To qualify for such approval, the independent study project must: (1) contain a significant and definable design component; (2) be based on the knowledge and skills acquired in earlier course work, (3) incorporate appropriate engineering standards; and (4) address multiple realistic constraints. To request approval, please complete the online form available at: http://www.brown.edu/academics/engineering/undergraduate-study

An ENGN course of equivalent level may be substituted subject to concentration advisor approval.

# Engineering and Physics

The Sc.B. program in Engineering and Physics is sponsored jointly by the School of Engineering and the Department of Physics. The program is designed to ensure that students take a significant portion of the usual curriculum in Engineering and in Physics, obtain substantial laboratory experience, and take several upper-level elective courses, focusing on applied science. Students may take either the standard Physics or Engineering programs during their freshman and sophomore years and then switch to this combined program. The Sc.B. degree program in Engineering and Physics is not accredited by ABET.

The following standard program assumes that a student begins mathematics courses at Brown with MATH 0170 or its equivalent. Students who begin in MATH 0200 can substitute an additional science, engineering or higher-level mathematics course for the MATH 0170 or MATH 0190 requirement. To accommodate the diverse preparation of individual students, variations of the following sequences and their prerequisites are possible with permission of the appropriate concentration advisor and the instructors involved. We recommend that each student's degree program be submitted for prior approval (typically in semester four) and scrutinized for compliance (in semester seven) by one faculty member from the Department of Physics and one faculty member from the School of Engineering.

Select one of the following two course sequences:

2  

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Prerequisite Courses</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 0030 &amp; ENGN 0040</td>
<td>Introduction to Engineering and Dynamics and Vibrations</td>
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</tr>
<tr>
<td>PHYS 0050 &amp; PHYS 0060</td>
<td>Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics</td>
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</tr>
<tr>
<td>PHYS 0070 &amp; PHYS 0160</td>
<td>Analytical Mechanics and Introduction to Relativity and Quantum Physics</td>
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</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
<td></td>
</tr>
<tr>
<td>MATH 0170</td>
<td>Advanced Placement Calculus</td>
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<td>MATH 0350</td>
<td>Honors Calculus</td>
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</tr>
<tr>
<td>CSCI 0040</td>
<td>Introduction to Scientific Computing and Problem Solving</td>
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</tr>
<tr>
<td>or CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
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<tr>
<td>or CSCI 0170</td>
<td>Computer Science: An Integrated Introduction</td>
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<td>or CSCI 0190</td>
<td>Accelerated Introduction to Computer Science</td>
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<tr>
<td>ENGN 0510</td>
<td>Electricity and Magnetism</td>
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<td>or PHYS 0470</td>
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<td>ENGN 1560</td>
<td>Applied Electromagnetics</td>
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<td>or PHYS 1510</td>
<td>Advanced Electromagnetic Theory</td>
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<tr>
<td>PHYS 0500</td>
<td>Advanced Classical Mechanics</td>
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<tr>
<td>or ENGN 1370</td>
<td>Advanced Engineering Mechanics</td>
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<tr>
<td>PHYS 1410</td>
<td>Quantum Mechanics A</td>
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<td>PHYS 1420</td>
<td>Quantum Mechanics B</td>
<td></td>
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<tr>
<td>or ENGN 0720</td>
<td>Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>ENGH 1620</td>
<td>Analysis and Design of Electronic Circuits</td>
<td></td>
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<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
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</tr>
<tr>
<td>or ENGN 0310</td>
<td>Mechanics of Solids and Structures</td>
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<tr>
<td>or ENGN 0810</td>
<td>Fluid Mechanics</td>
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<tr>
<td>or PHYS 1600</td>
<td>Computational Physics</td>
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<tr>
<td>ENGN 0410</td>
<td>Materials Science</td>
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<tr>
<td>or ENGN 1690</td>
<td>Photonics and Applications</td>
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<tr>
<td>or PHYS 0560</td>
<td>Experiments in Modern Physics</td>
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<td>PHYS 1560</td>
<td>Modern Physics Laboratory</td>
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</tr>
<tr>
<td>or ENGN 1590</td>
<td>Introduction to Semiconductors and Semiconductor Electronics</td>
<td></td>
</tr>
</tbody>
</table>

Select three additional higher-level math, applied math, or mathematical physics (PHYS 0720) courses.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).

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# English

We study how literature works, how we understand it, and how we write about it. We examine closely matters of language, form, genre, and critical method. We invite you to new practices of reading and writing that promote the understanding of literatures and cultures in English through history, criticism, and theory. We are committed to the understanding of literature from a transnational perspective, emphasizing the movement of texts and peoples across borders of nation, race, gender, and sexuality, now and in the past. And we encourage students to commit themselves to the creation of original knowledge in their reading and writing.

In addition to the English concentration, we offer an English concentration track in the practice of Nonfiction Writing. The concentration in English and the English/Nonfiction track follow the same core requirements, and students in the English concentration may elect Nonfiction Writing courses as electives. We invite applications from qualified juniors to the honors programs in both English and Nonfiction. One of the largest humanities concentrations at Brown, English provides a strong foundation for a liberal education and for work in many sectors of employment, especially in the many areas where new media creates demand for transformative writing: the press, publishing, advertising, visual media, public relations, public service, teaching, finance, government, corporate research and administration. English concentrators routinely go on to law, medical, and professional schools as well as to graduate education in literature and the arts.

# About the Concentration

We encourage students interested in concentrating in English to come into the department offices at 70 Brown Street and speak with a concentration advisor. Students in English courses who are considering an English concentration are welcome to make an appointment to speak with their instructor. Concentration programs must be approved by a concentration advisor. To declare a concentration, students must fill out an online Concentration form via ASK and enter their plan of study indicating the requirements that each course fulfills.

# Concentration Requirements (10 courses):

1. ONE “How Literature Matters” course (ENGL0100):  
   - ENGL 0100A How To Read A Poem  
   - ENGL 0100D Matters of Romance  

2. THREE electives from a list of approved courses:  
   - PHYS 1420 Quantum Mechanics B  
   - PHYS 1530 Thermodynamics and Statistical Mechanics  
   - ENGH 1620 Analysis and Design of Electronic Circuits  
   - CHEM 0330 Equilibrium, Rate, and Structure  
   - PHYS 1600 Computational Physics  
   - ENGN 0410 Materials Science  
   - PHYS 1560 Modern Physics Laboratory  
   - ENGN 1590 Introduction to Semiconductors and Semiconductor Electronics  
   - ENGN 1590 Modern Physics Laboratory  
   - ENGN 1590 Introduction to Semiconductors and Semiconductor Electronics  

3. ONE thesis under the supervision of a physics or engineering faculty member:  
   - PHYS 1990 Senior Conference Course  
   - or ENGN 1970 Independent Studies in Engineering  
   - or ENGN 1971 Independent Study in Engineering  

* Students are also encouraged to take courses dealing with the philosophical, ethical, or political aspects of science and technology.

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Total Credits: 19
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 0100F</td>
<td>Devils, Demons, and Do Gooders</td>
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<tr>
<td>ENGL 0100G</td>
<td>The Literature of Identity</td>
</tr>
<tr>
<td>ENGL 0100J</td>
<td>Cultures and Countercultures: The American Novel after World War II</td>
</tr>
<tr>
<td>ENGL 0100M</td>
<td>Writing War</td>
</tr>
<tr>
<td>ENGL 0100N</td>
<td>City Novels</td>
</tr>
<tr>
<td>ENGL 0100P</td>
<td>Love Stories</td>
</tr>
<tr>
<td>ENGL 0100Q</td>
<td>How Poems See</td>
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<tr>
<td>ENGL 0100R</td>
<td>American Histories, American Novels</td>
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<tr>
<td>ENGL 0100S</td>
<td>Being Romantic</td>
</tr>
<tr>
<td>ENGL 0100T</td>
<td>The Simple Art of Murder</td>
</tr>
<tr>
<td>ENGL 0100V</td>
<td>Inventing Asian American Literature</td>
</tr>
</tbody>
</table>

2. ONE course before 1700: 1
These are courses that focus on the early modern period, i.e. medieval and renaissance literatures.

3. ONE course after 1700: 1
These are courses that focus on the 18th-century and beyond.

4. ONE course in "Literature Across Borders": 1
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<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ENGL 0100A</td>
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<td>ENGL 0100F</td>
<td>Devils, Demons, and Do Gooders</td>
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<td>American Histories, American Novels</td>
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<tr>
<td>ENGL 0150E</td>
<td>Love and Friendship</td>
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<td>ENGL 0150U</td>
<td>The Terrible Century</td>
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<td>ENGL 0150X</td>
<td>The Claims of Fiction</td>
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<td>ENGL 0510Q</td>
<td>Unstable Subjects: Race and Meaning in Contemporary (African) American Literature</td>
</tr>
<tr>
<td>ENGL 0511E</td>
<td>Melville, Conrad, and the Sea</td>
</tr>
<tr>
<td>ENGL 0700E</td>
<td>Postcolonial Literature</td>
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<tr>
<td>ENGL 0710B</td>
<td>African American Literature and the Legacy of Slavery</td>
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<tr>
<td>ENGL 0710E</td>
<td>Postcolonial Tales of Transition</td>
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<tr>
<td>ENGL 0710L</td>
<td>Ishiguro, Amongst Others</td>
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<tr>
<td>ENGL 0710Q</td>
<td>American Literature in the Era of Segregation</td>
</tr>
<tr>
<td>ENGL 1310H</td>
<td>The Origins of American Literature</td>
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<tr>
<td>ENGL 1360U</td>
<td>Europe in the Vernacular</td>
</tr>
<tr>
<td>ENGL 1561D</td>
<td>Writing and the Ruins of Empire</td>
</tr>
<tr>
<td>ENGL 1710I</td>
<td>Harlem Renaissance: The Politics of Culture</td>
</tr>
<tr>
<td>ENGL 1710J</td>
<td>Modern African Literature</td>
</tr>
<tr>
<td>ENGL 1710K</td>
<td>Literature and the Problem of Poverty</td>
</tr>
<tr>
<td>ENGL 1710P</td>
<td>The Literature and Culture of Black Power Reconsidered</td>
</tr>
<tr>
<td>ENGL 1711E</td>
<td>African American Literature After 1975</td>
</tr>
<tr>
<td>ENGL 1761V</td>
<td>The Korean War in Color</td>
</tr>
<tr>
<td>ENGL 1900D</td>
<td>Literature and Politics</td>
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</table>

5. ONE theory course: 1
6. FIVE electives: 5

Total Credits: 10

All substitutions and/or exceptions must be approved by the concentration advisor in consultation with the Director of Undergraduate Studies. A substitution or exception is not approved until specified in writing in the student's concentration file housed in the English Department.

### English Concentration -- Nonfiction Writing Track (10 courses)

The English concentration also includes a Nonfiction Writing Track. The requirements are the same as 1 through 6 above, but three of the five electives must be 1000-level Nonfiction Writing courses (only ONE of which may be intermediate). Only THREE Nonfiction courses may count toward the concentration.

### Honors in English

The English Honors program is intended for students who have been highly successful in their English concentration coursework and who want the opportunity to pursue a research project in more depth than is possible in an undergraduate seminar. The program is intended for those students with a strong desire to conduct independent research under the supervision of a thesis advisor and culminates in the writing of a thesis during the senior year.

#### Admission

Students apply to the Honors Program early in the second semester of their junior year. December or mid-year graduates may apply in their 6th semester, but are encouraged to apply during their 5th semester and write their theses alongside May graduates. Interested concentrators should speak to the Honors Advisor early in their junior year to discuss their plans. Specific deadlines for admission are announced annually and are available on the department website. Students who are studying off campus are expected to meet the application submission deadline.

 Admission to the English Honors Program depends on evidence of ability and promise in the study of literature. To be eligible for admission, students must have received more As than Bs (and no Cs or below) in concentration courses completed. Students must complete an application; supply a brief writing sample, and request two letters of recommendation from English faculty with whom they have taken courses. If necessary, letters may come from faculty in related departments. Letters from teaching assistants may only serve as supporting recommendations. Candidates must also submit a one-page project proposal signed by the faculty member who has agreed to serve as the thesis advisor.

See procedures and application (http://brown.edu/academics/english/english-honors-procedures) for more details.

December or mid-year graduates who wish to apply to honors have two options, but the first is highly encouraged:

**Option 1:**
In their 5th semester (Spring), students apply to the honors program along with the other juniors. Accepted students will be incorporated into the regular honors cohort and must meet the same deadlines: i.e. they must complete their theses at the same time as the other honors students (though for mid-years this will be at the end of their 7th semester). They register for ENGL 1911 English Honors Seminar in the Fall, and ENGL 1992 Senior Honors Thesis in the Spring.

**Option 2:**
In the 7th semester (the Spring of their final year), students take an independent study with their thesis advisor, under whose direction they will begin to research and write their theses. This course must be taken S/NC. In the 8th semester (the Fall of their final year), as they complete their theses, students take ENGL 1992 for a grade. Mid-year graduates should consult with the Honors Director for information about deadlines.

#### Requirements

The course requirements for the English Honors Program are the same as those for the regular concentration, with the following additions:

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1. Each course may fulfill ONE requirement. Five courses must be 1000-level courses. With advisor approval, two of the ten required courses may be taken in departments other than English.

2. Only TWO courses dealing primarily with the practice of writing at the 1000-level may be counted as electives.

One ENGL 0200 may be counted toward the 10-course requirement only as an elective.

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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
As part of regular coursework, and counting toward the concentration requirements, honors candidates must complete at least three upper-level seminars or comparable small courses in which students have the opportunity to do independent research, take significant responsibility for discussion, and do extensive scholarly and critical writing. Students are encouraged to include at least one graduate seminar in their program. (Permission to take a graduate course must be obtained from the instructor.) Honors candidates should discuss their proposed course of study with the Honors Advisor.

During the Fall and Spring of the senior year, honors candidates must complete two additional courses beyond the ten courses required by the regular concentration: ENGL 1991 and ENGL 1992. ENGL 1991 is the Senior Honors Seminar, in which students begin to research and write their theses, as well as meet to discuss their work. This is a mandatory S/NC course. ENGL 1992, the Senior Honors Thesis is an independent research course that must be taken for a grade.

Honors candidates must continue to receive more As than Bs in courses taken as part of the concentration. Courses completed with a grade of C will not count toward an Honors concentration. A student who receives such a grade and wishes to continue in the program must complete a comparable course with a grade higher than C.

The Honors Thesis

The Honors thesis is an extended essay, usually between 50 and 80 pages, written under the supervision of a department faculty advisor and second reader. (Where appropriate, the advisor or the reader, but not both, may be in another department.) The thesis may be an interdisciplinary or creative project, but it is usually an essay on a scholarly or critical problem dealing with works of literature in English. The specific topic and approach of the thesis are worked out between the student and the thesis advisor, with assistance from the student's second reader. This process should begin in the latter part of the student's junior year. A good way to get an idea of what sorts of projects are possible is to visit the Hay Library, which stores theses from previous years, or to meet with the Honors Advisor.

A prospectus describing the project and endorsed by the faculty advisor must be submitted to the Honors Advisor at the beginning of the senior year. At the end of the senior year fall term, a student must submit approximately 25 pages of draft material toward the thesis. Full thesis drafts are due by mid-March; final bound copies of the thesis are due in mid-April. Late theses will not be accepted for honors after the April deadline; students who hand in theses after the deadline but before the end of the term will receive a grade for the thesis course, but they will not be eligible for departmental honors. The completed thesis will be evaluated by the student's advisor and a second reader, each of whom provides written commentary and suggests a grade for ENGL 1992.

Evaluation

The English Department reviews the academic record as well as the thesis evaluations for each senior completing the Honors Program. Following a successful review, the student will be eligible to graduate with Honors in English.

Honors in Nonfiction Writing

The Nonfiction Writing Honors Program is intended for students who have been highly successful in their English concentration work. Specifically, it allows those who have an expressed and proven interest in nonfiction writing to pursue more completely a single project under the supervision of a first reader. The intention is to help students to complete work worthy of publication. The program culminates in the writing of a thesis during the senior year.

Admission

Students apply to the Nonfiction Writing Honors Program in the second semester of their junior year. December or mid-year graduates may apply in their 6th semester, but are encouraged to apply during their 5th semester and write their theses alongside May graduates. Interested concentrators should have already made contact with at least one member of the Nonfiction Writing faculty and should meet with the Honors Advisor early in their junior year to discuss their plans. Specific deadlines for admission are announced annually and are available on the department website. Students who are studying off campus are expected to meet the application submission deadline.

Admission to the Honors Program in Nonfiction Writing depends upon a student's demonstrated superior ability in nonfiction writing. Students must have taken either one intermediate and one advanced writing course, or two advanced writing courses by the end of their sixth semester and completed each of them with an S. To be eligible for admission, students must have earned more As than Bs (and no Cs or below) in other courses in the concentration plan. Students must submit an application, three letters of recommendation, a writing sample from an advanced writing course, and a project proposal.

See procedures and application (http://brown.edu/academics/english/nonfiction-honors-procedures) for more details.

December or mid-year graduates who wish to apply for nonfiction honors have two options, but the first is highly encouraged:

Option 1:

In their 5th semester (Spring), students can apply to the nonfiction honors program along with the other juniors. Accepted students will be incorporated into the regular nonfiction honors cohort and must meet the same deadlines: i.e. they must complete their theses at the same time as the other honors students (though for mid-years this will be at the end of their 7th semester). They register for ENGL 1993 Nonfiction Honors Seminar in the Fall and ENGL 1994 Senior Honors Thesis in Nonfiction in the Spring.

Option 2:

In their 7th semester (the Spring of their final year) students take ENGL 1200 and in their 8th semester (the Fall of their final year) they take ENGL 1994. (Students choosing this option must consult with the Honors Advisor for information on deadlines.)

Requirements

Students in the Nonfiction Writing Honors Program take two additional courses beyond the ten courses required by the Nonfiction Writing Track -- ENGL 1993 Honors Seminar in Nonfiction Writing (with the Honors Advisor) and ENGL 1994 Senior Honors Thesis in Nonfiction Writing; the Honors track will bring to twelve the total number of required courses. The ENGL 1993 grade option must be S/NC; ENGL 1994 must be taken for a grade. Honors candidates should discuss their proposed course of study with the faculty member they choose to direct their thesis.

Honors candidates must continue to receive more As than Bs in courses taken as part of the concentration. Courses completed with a grade of C will not count toward an Honors concentration. A student who receives a "C" after admission to Nonfiction Honors and wishes to continue in the program must complete an additional course in a comparable subject area, with a grade higher than C.

The Honors Thesis

The Nonfiction Writing Honors thesis is an extended project, usually of between 50 and 80 pages, written under the supervision of one of the Nonfiction Writing faculty and a second reader (who can be from literature or another department). The specific topic and approach of the thesis are worked out between the student and the first reader, with assistance from the student's second reader. A good way to get an idea of what sorts of projects are possible is to visit the Hay Library, which stores theses from previous years, or to meet with the Honors Advisor. The work typically is in a genre chosen from Nonfiction Writing's spectrum: critical analysis, literary journalism, memoir, lyric essay, or narrative based on travel, science, history, or cultural critique.

Full thesis drafts are due by mid-March; final bound copies of the thesis are due in mid-April. Late theses will not be accepted for honors after the April deadline; students who hand in theses after the deadline but before the end of the term will receive a grade for the thesis course, but they will not be eligible for departmental honors. The completed thesis will be evaluated by its first reader and second reader, each of whom provides written commentary and suggests a grade for ENGL 1994.

Evaluation

The English Department reviews the academic record as well as the thesis evaluations for each senior completing the Nonfiction Writing Honors
Environmental Studies

Many of the most pressing challenges of the 21st Century are environmental ones. We must find ways to feed a growing human population while maintaining the natural life support system provided by the Earth's ecosystems; to make built environments more efficient as urban areas continue to grow dramatically in size; and to meet the challenges posed by rising sea-level and increasing global temperatures. These challenges are complex, multifaceted and can best be solved with expertise from multiple, relevant disciplines. To prepare students to meet these challenges, the Institute at Brown for Environment and Society (IBES) offers two undergraduate degrees: an A.B. in Environmental Studies and a Sc.B. in Environmental Science. The two degrees vary primarily in the number of course requirements; the Sc.B. is a more in-depth treatment of a single field. Both degrees provide interdisciplinary exposure to the natural and social sciences, as well as public policy. Both degrees also develop depth in a primary field by requiring students to select one of four tracks of study. Concentrators might also consider pursuing the Engaged Scholars Program, which allows them to connect theory and practice and gain hands-on experience working with community partners.

Through a rigorous set of core courses, track requirements, and a course or project-based capstone experience, our students are primed to make meaningful contributions to environmental scholarship and outreach at local, national and global scales.

If you have administrative questions regarding theses concentrations or wish to be added to the email directory listing upcoming events, then please contact Jeanne Loewenstein (jeanne_loewenstein@brown.edu), the administrative manager.

Standard program in Environmental Studies and Environmental Science:

The Institute at Brown for Environment and Society administers two concentrations, one offering an A.B. degree in Environmental Studies (requires 14-15 courses) and the other a Sc.B. degree in Environmental Science (requires 19-20 courses). Below are a set of course offerings arranged into four tracks:

1. Air, Climate & Energy
2. Conservation Science & Policy
3. Environment & Inequality (New)
4. Land, Water & Food Security
5. Sustainability in Development

Requirements for the A.B. Degree

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<tr>
<td>ECON 0110 Principles of Economics</td>
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<tr>
<td>ENVS 0490 Enviromental Science in a Changing World</td>
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<tr>
<td>ENVS 0495 Introduction to Environmental Social Science</td>
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<td>BIOL 0210 Diversity of Life</td>
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<tr>
<td>or GEOL 0240 Earth: Evolution of a Habitable Planet</td>
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<tr>
<th>Methods - one course</th>
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<tbody>
<tr>
<td>ENVS 1920 Methods for Interdisciplinary Environmental Research</td>
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</table>

Electives - three courses

You may choose among any ENVS course, any course shown on one or more of the tracks, and any prerequisites listed for a required course.

Capstone - one or two courses

This requirement can be met with a two-semester thesis (ENVS 1970 & ENVS 1971), one-semester research project (ENVS 1970 or ENVS 1971), or an approved capstone course.

Track Specific Requirements

**Track 1 - Air, Climate, and Energy**

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<thead>
<tr>
<th>Climate: Select One</th>
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<tbody>
<tr>
<td>GEOL 1350 Weather and Climate</td>
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<td>GEOL 1430 Principles of Planetary Climate</td>
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<th>Physics:</th>
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<tr>
<td>PHYS 0050 Foundations of Mechanics</td>
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<tbody>
<tr>
<td>ENGN 1930U Renewable Energy Technologies</td>
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<td>PHYS 0114 The Science and Technology of Energy</td>
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<tr>
<td>ENVS 1415 Power, Justice, and Climate Change</td>
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<tr>
<td>ENVS 1575 Engaged Climate Policy at the UN Climate Change Talks</td>
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<tr>
<td>ENVS 1615 Making Connections: The Environmental Policy Process</td>
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<tr>
<td>ENVS 1755 Globalization and the Environment</td>
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<td>ENVS 1925 Energy Policy and Politics</td>
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<tr>
<td>ENVS 1400 Sustainable Design in the Built Environment</td>
</tr>
<tr>
<td>ENVS 1580 Environmental Stewardship and Resilience in Urban Systems</td>
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</table>

**Track 2 - Conservation Science and Policy**

Ecology:

| BiOL 0420 Principles of Ecology |

Conservation:

| BiOL 1470 Conservation Biology |

Ecology & Conservation Topics: Select One

| BiOL 0455 Coastal Ecology and Conservation |
| BiOL 1450 Community Ecology |
| BiOL 1480 Terrestrial Biogeochemistry and the Functioning of Ecosystems |

<table>
<thead>
<tr>
<th>Policy: Select One</th>
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<td>APMA 1650 Statistical Inference I</td>
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<tr>
<td>BIOL 0495 Statistical Analysis of Biological Data</td>
</tr>
<tr>
<td>ECON 1620 Introduction to Econometrics</td>
</tr>
</tbody>
</table>

**Track 3 – Environment and Inequality (New)**

Track Intro Course:

| ENVS 0705 - Equity and the Environment: Movements, Scholarship, Solutions |

Race, Class, and Gender Inequality: Select One

| AFRI 0090 An Introduction to Africana Studies |
| AFRI 0210 Afro Latin Americans and Blackness in the Americas |
| ECON 1370 Race and Inequality in the United States |
| ETHN 0500 Introduction to American/Ethnic Studies |
| ETHN 1039 History and Resistance in Representations of Native Peoples |
| GNSS 1600 Embodying Feminisms/Feminist Embodiments |

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIST 1974J Decolonizing Minds: A People’s History of the World
SOC 0230 Sex, Gender, and Society
SOC 1270 Race, Class, and Ethnicity in the Modern World
SOC 1872C Race and Ethnic Relations, Identity, and Inequality

Environment and Inequality: Select One
ANTH 0110 Anthropology and Global Social Problems: Environment, Development, and Governance
ENVS 0710 Powering the Past: The History of Energy
ENVS 1415 Power, Justice, and Climate Change
ENVS 1910 The Anthropocene: The Past and Present of Environmental Change
HIST 0270B From the Columbian Exchange to Climate Change: Modern Global Environmental History

PHP 1700 Current Topics in Environmental Health

Tools: Select One
ANTH 1940 Ethnographic Research Methods
ECON 1620 Introduction to Econometrics
EDUC 1100 Introduction to Qualitative Research Methods
GEOL 1320 Introduction to Geographic Information Systems for Environmental Applications
GEOL 1330 Global Environmental Remote Sensing
SOC 1100 Introductory Statistics for Social Research
SOC 1117 Focus Groups for Market and Social Research
SOC 1340 Principles and Methods of Geographic Information Systems
SOC 2610 Spatial Thinking in Social Science

Policy and Politics: Select One
ENVS 1415 Power, Justice, and Climate Change
ENVS 1555 Urban Agriculture: The Importance of Localized Food Systems
ENVS 1575 Engaged Climate Policy at the UN Climate Change Talks
INTL 1700 International Law
POLS 0400 Introduction to International Politics
POLS 1730 Politics of Globalization
PLCY 2555 Environmental Policy, From the Ground Up
URBN 1000 Fieldwork in the Urban Community
URBN 1220 Planning Sustainable Cities

Track 4 - Land, Water & Food Security
Climate: Select One
GEOL 1350 Weather and Climate
GEOL 1430 Principles of Planetary Climate

Biology: Select One
BIOL 0210 Diversity of Life
BIOL 0160 Plants, Food, and People
BIOL 0420 Principles of Ecology
BIOL 0430 The Evolution of Plant Diversity
BIOL 0455 Coastal Ecology and Conservation

Environmental History: Select One
ANTH 0680 Anthropology of Food
ENVS 1910 The Anthropocene: The Past and Present of Environmental Change
HIST 1820A Environmental History

Policy: Select One
ENVS 1350 Environmental Economics and Policy
ENVS 1555 Urban Agriculture: The Importance of Localized Food Systems
ENVS 1575 Engaged Climate Policy at the UN Climate Change Talks
ENVS 1615 Making Connections: The Environmental Policy Process
ENVS 1925 Energy Policy and Politics
POLS 1740 Politics of Food

Tools: Select One
GEOL 1320 Introduction to Geographic Information Systems for Environmental Applications
GEOL 1330 Global Environmental Remote Sensing
SOC 1340 Principles and Methods of Geographic Information Systems

Track 5 - Sustainability in Development
Environment and Development: Select Two
ECON 1410 Urban Economics
ECON 1530 Health, Hunger and the Household in Developing Countries
ENVS 1415 Power, Justice, and Climate Change
ENVS 1555 Urban Agriculture: The Importance of Localized Food Systems
ENVS 1580 Environmental Stewardship and Resilience in Urban Systems
ENVS 1755 Globalization and the Environment

Policy: Select Two
ENVS 1350 Environmental Economics and Policy
ENVS 1575 Engaged Climate Policy at the UN Climate Change Talks
ENVS 1615 Making Connections: The Environmental Policy Process
ENVS 1925 Energy Policy and Politics

Analysis Tools: Select One
ECON 1620 Introduction to Econometrics
ANTH 1940 Ethnographic Research Methods
EDUC 1100 Introduction to Qualitative Research Methods
GEOL 1320 Introduction to Geographic Information Systems for Environmental Applications
GEOL 1330 Global Environmental Remote Sensing
SOC 1100 Introductory Statistics for Social Research
SOC 1117 Focus Groups for Market and Social Research
SOC 1340 Principles and Methods of Geographic Information Systems

Total Credits 14-15

1 The ECON 0110 core requirement can be waived for students with an AP exam score of 4 or 5 in both Microeconomics and Macroeconomics.
2 The core requirement of ENVS 0490 can be waived for students with an AP exam score of 5 in Environmental Science.
3 Students pursuing the Sc.B. must take ECON 1620.

Requirements for the Sc.B. Degree

Requires ALL 14-15 course requirements as listed in the A.B. Program
Additional Track specific requirements for the Sc.B. 5
Track 1 - Air, Climate, and Energy
Math: Select Both
MATH 0090  Introductory Calculus, Part I  
MATH 0100  Introductory Calculus, Part II

Environmental Economics: Select One
ENVS 1350  Environmental Economics and Policy

Advanced Climate: Select One
GEOG 1510  Introduction to Atmospheric Dynamics
GEOG 1520  Ocean Circulation and Climate

Thermal/Chem: Select One
ENGN 0720  Thermodynamics
GEOG 1370  Environmental Geochemistry

Track 2 - Conservation Science and Policy
Math: Select One
MATH 0090  Introductory Calculus, Part I

Evolution: Select One
BIOL 0480  Evolutionary Biology

Organismal Diversity: Select One
BIOL 0410  Invertebrate Zoology
BIOL 0430  The Evolution of Plant Diversity (BIOL 0460 - Insect Biology)
BIOL 0940C  Sophomore Seminar: Insect Biology
BIOL 0940D  Rhode Island Flora: Understanding and Documenting Local Plant Diversity
BIOL 1880  Comparative Biology of the Vertebrates

Env. Econ: Select One
ENVS 1350  Environmental Economics and Policy

Tools: Select One
GEOL 1320  Introduction to Geographic Information Systems for Environmental Applications
GEOL 1330  Global Environmental Remote Sensing
SOC 1340  Principles and Methods of Geographic Information Systems

Track 3 – Environment and Inequality (New)
Tools: Select One
ANTH 1940  Ethnographic Research Methods
ECON 1620  Introduction to Econometrics
EDUC 1100  Introduction to Qualitative Research Methods

GEOL 1320  Introduction to Geographic Information Systems for Environmental Applications
GEOL 1330  Global Environmental Remote Sensing
SOC 1100  Introductory Statistics for Social Research
SOC 1117  Focus Groups for Market and Social Research
SOC 1340  Principles and Methods of Geographic Information Systems
SOC 2610  Spatial Thinking in Social Science

Race, Class and Gender Inequality: Select One
ECON 1370  Race and Inequality in the United States
ETHN 1039  History and Resistance in Representations of Native Peoples
GNSS 1600  Embodying Feminisms/Feminist Embodiments
HIST 1974J  Decolonizing Minds: A People's History of the World
SOC 1270  Race, Class, and Ethnicity in the Modern World
SOC 1872C  Race and Ethnic Relations, Identity, and Inequality

SELECT A FOCUS AREA (pick three courses from only one focus area)

FOCUS ONE - Environmental Inequality in Globalization and Development: Select Three
ANTH 0110  Anthropology and Global Social Problems: Environment, Development, and Governance
ECON 1355  Environmental Issues in Development Economics
ECON 1510  Economic Development
ECON 1530  Health, Hunger and the Household in Developing Countries
ENVS 1415  Power, Justice, and Climate Change
HIST 0150D  Refugees: A Twentieth-Century History
PHP 1070  The Burden of Disease in Developing Countries
POLS 1730  Politics of Globalization
SOC 0150  Economic Development and Social Change

FOCUS TWO - Environmental Health and Inequality: Select Three
AFRI 1060W  Policy, Culture and Discourse that Shape Health and Access to Healthcare
AMST 1700I  Community Engagement with Health and the Environment
ANTH 1310  International Health: Anthropological Perspectives
BIOL 1820  Environmental Health and Disease
HIST 1960Q  Medicine and Public Health in Africa
PHP 0320  Introduction to Public Health
PHP 1070  The Burden of Disease in Developing Countries
PHP 1700  Current Topics in Environmental Health
PHP 1530  Case Studies in Public Health: The Role of Governments, Communities and Professions
PHP 1920  Social Determinants of Health

FOCUS THREE - Environmental Inequalities in Food, Water, and Energy: Select Three
ENVS 0710  Powering the Past: The History of Energy
ENVS 1415  Power, Justice, and Climate Change
ENVS 1555  Urban Agriculture: The Importance of Localized Food Systems
ENVS 1580  Environmental Stewardship and Resilience in Urban Systems
ENVS 1925  Energy Policy and Politics
ETHN 1890M  Treaty Rights and Food Fights: Eating Local in Indian Country
PLCY 2555  Environmental Policy, From the Ground Up

Track 4 - Land, Water & Food Security
Math: Select One
MATH 0090  Introductory Calculus, Part I

Chemistry: Select One
CHEM 0330  Equilibrium, Rate, and Structure

Earth/Life Systems: Select Three
BIOL 1470  Conservation Biology
BIOL 1475  Biogeography
BIOL 1480  Terrestrial Biogeochemistry and the Functioning of Ecosystems
GEOL 0240  Earth: Evolution of a Habitable Planet
GEOL 1130  Ocean Biogeochemical Cycles
GEOL 1310  Global Water Cycle
GEOL 1370  Environmental Geochemistry

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
GEOL 1510 Introduction to Atmospheric Dynamics
GEOL 1660 Instrumental Analysis with Environmental Applications

Track 5 - Sustainability in Development
Sociology and Politics: Select One
SOC 1870K Demographics and Development
POLS 0400 Introduction to International Politics
ENVS 1755 Globalization and the Environment

Critical Perspectives on Development: Select One
AMST 1700I Community Engagement with Health and the Environment
ANTH 0110 Anthropology and Global Social Problems: Environment, Development, and Governance
SOC 1871D Sophomore Seminar in Sociology of Development

Economic Perspectives: Select Two
ECON 1110 Intermediate Microeconomics
ECON 1340 Economics of Global Warming
ECON 1355 Environmental Issues in Development Economics
ECON 1510 Economic Development
ECON 1530 Health, Hunger and the Household in Developing Countries
ECON 1560 Economic Growth

Climate: Select One
GEOL 1350 Weather and Climate

Total Credits: 19-20

1. The track requirement of MATH 0090 can be waived for students with an AP exam of 4 or 5 on Calc AB.

2. The ACE MATH 0090 and MATH 0100 track requirements can be waived for students with an AP exam score of 4 or 5 on Calc BC.

Honors
Students interested in graduating with honors in their concentration must complete a thesis determined to be of the highest quality and must have excelled in their coursework required for the concentration, which is defined here as receiving a grade of "A" in the majority of courses taken to fulfill the concentration. You can learn more by visiting the honors page (https://www.brown.edu/academics/institute-environment-society/education/undergraduate/honors) on the IBES website.

Ethnic Studies
Ethnic Studies is an interdisciplinary, comparative concentration that examines the construction of race and ethnicity in social, cultural, historical, political, and economic contexts. Concentrators develop individual programs based on areas of focus in consultation with faculty advisors, drawing from courses in the humanities and social sciences. Typical areas of focus are social issues (such as inequality, education, or health), cultural production and the representation of racial groups, processes of racialization, the historical formation of transnational communities and of diaspora, and the history of particular ethnic or racial groups.

The Ethnic Studies concentration (https://www.brown.edu/academics/american-studies/ethnic-studies) at Brown emphasizes the histories of diverse racial groups within and across the borders of the United States, including examining issues of diaspora, migration, social movements, and the political economies of social inequality and racial formation. Concentrators strive for intellectual fluency in a range of critical approaches to race and ethnicity across disciplines, and demonstrate this fluency through the composition or creation of a significant piece of original research or creative work.

Brown University established an Ethnic Studies concentration in 1996, originally within the Center for the Study of Race and Ethnicity in America (https://www.brown.edu/academics/race-ethnicity) (CSREA). In the Fall of 2013, as part of changes to the CSREA and to better support students, Ethnic Studies joined a long established Brown department, American Studies (https://www.brown.edu/academics/american-studies/home). Many American Studies faculty members (https://www.brown.edu/academics/american-studies/people) work in the areas of race and ethnicity and have held joint appointments in Ethnic and American Studies while American Studies PhD students (https://www.brown.edu/academics/american-studies/graduate-students) have done some of the most exciting Ethnic Studies research on campus. Faculty and students in Ethnic Studies and American Studies are eager to see how the two programs move forward together.

As an academic field, Ethnic Studies is rooted in the protests of the 1960s and 1970s, out which emerged the very first Latino/a Studies, Asian American Studies, African American Studies, and Native American studies programs. Organized around straightforward political goals – the enrichment through diversification of the curriculum and the systematic, multi-disciplinary, and the often comparative study of racial and ethnic inequality – Ethnic Studies has become an important feature of major research universities.

Faculty, both core and affiliated, create and participate in groundbreaking Ethnic Studies scholarship. Areas of faculty research include borderlands history, Latina/o literary studies, and indigenous movements. Students can focus in Native American, Asian American, or Latino Studies and choose a thematic interest including such current examples as: "social issues affecting racialized groups" (students have looked at health disparities or educational inequality); "the study of cultural production or cultural representations;" "the history of a particular racial or ethnic group;" and "the study of comparative processes of racialization."

Requirements (for students starting with the class of 2019)

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<th>Course Title</th>
<th>Credits</th>
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<td>ETHN 1000</td>
<td>Introduction to American/Ethnic Studies</td>
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<td>ETHN 1200B</td>
<td>Contemporary Indigenous Education in North America</td>
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<td>ETHN 1200D</td>
<td>Latinx Literature</td>
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<td>ETHN 1200E</td>
<td>Latinx Novel Lab</td>
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<td>ETHN 1750A</td>
<td>Immigrant Social Movements: Bridging Theory and Practice</td>
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<td>ETHN 1750B</td>
<td>Treaty Rights and Food Fights: Eating Local in Indian Country</td>
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<td>ETHN 1750D</td>
<td>Transpacific Asian American Studies</td>
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<td>ETHN 1750E</td>
<td>Transpacific Popular Culture</td>
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<td>AMST 1700D</td>
<td>Race and Remembering</td>
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<td>AMST 1700F</td>
<td>American Publics</td>
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<td>Public Memory: Narratives of 9/11</td>
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<td>Community Engagement with Health and the Environment</td>
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<td>Race in the Americas: A Hemispheric Perspective</td>
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<td>The Problem of Class in America</td>
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<td>America and the Asian Pacific: A Cultural History</td>
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<td>AMST 1900C</td>
<td>Narratives of Slavery</td>
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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Composing a senior honors project in Ethnic Studies requires the following:

- A 3.5 GPA in concentration courses
- A 3.0 overall GPA
- Completion of the standard concentration
- Completion of two additional independent studies, taken in the seventh and eighth semesters
- A completed project, delivered on the due date
- A recommendation for honors from both readers

In their sixth semester, students who want to graduate with honors should enroll in AMST/ETHN 1800, the Honors Seminar. They must define their honors project by April 1. This means composing a two-page, single-spaced proposal along with a bibliography of relevant sources, which must be submitted for approval to the faculty. The proposal should identify the problem, or question, and suggest approaches and possible hypotheses or outcomes. It should also name the readers. Students need to work with two professors—a director and a reader. At least one should be Ethnic Studies faculty. If a student wants to work with two professors, neither of whom is Ethnic Studies faculty, then they should have a second reader who will read the final draft or consult on the final project and approve it for honors in the field.

In their seventh and eight semesters, students seeking honors will enroll in an independent study class with their director, which will include a monthly meeting, in which they would write and revise sections of their thesis and follow through on the plan devised in the spring of their junior year. Students should meet with both their director and their reader during this time.

In their eighth semester, the deadline for a finished full draft of their project is April 21. Students should turn in a completed (proofread, formatted, fully written) draft to their readers by that day. Of course, students will turn chapters to the director and reader before that, according to their recommendations, but April 21 is the absolute deadline to turn in a draft that needs only very minor corrections. All official readers must recommend the project for honors. When written as formal research papers, honors theses are generally between 50-100 pages. When there is a creative or public component, students should work closely with their faculty team to determine the appropriate length of the written accompaniment. Students will make a public presentation of their work to the Ethnic Studies faculty during the first week of May.

**Requirements (for students through the class of 2018):**

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<td>Introduction to Latina/o Cultural Studies</td>
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<td>ETHN 0550</td>
<td>Introduction to Comparative Perspectives</td>
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<td>ETHN 1120</td>
<td>From Coyote to Casinos: Native North American Peoples and Cultures</td>
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<td>ETHN 1420</td>
<td>Ethnicity, Race, and Gender in the Americas</td>
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<td>ETHN 1400</td>
<td>Race, Culture, and Ethnic Politics</td>
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<td>ETHN 1000Z</td>
<td>Latinos and Film</td>
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<td>ETHN 1000F</td>
<td>Theory, Creativity, Activism</td>
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<td>ETHN 1000E</td>
<td>Senior Seminar in Ethnic Studies</td>
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<td>Community, Language and Literacy: A Practicum</td>
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<td>ETHN 1001H</td>
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<td>From Perry to Pokemon: Japan in the United States, the United States in Japan</td>
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<td>Gender, Race, and Class in the United States</td>
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<td>Green Cities: Parks and Designed Landscapes in Urban America</td>
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<td>ETHN 1000T</td>
<td>Disability: History, Theory, and Bodily Difference</td>
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<td>ETHN 1000U</td>
<td>Immigrant Radicals: Asian Political Movements in the Americas 1850-1970</td>
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<td>ETHN 1000V</td>
<td>Immigrants, Exiles, Refugees, and Citizens in the Americas</td>
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<td>ETHN 1000W</td>
<td>Latino Literature: The Shifting Boundaries of Identity</td>
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<td>ETHN 1000X</td>
<td>Latina/o Religions: Encounters of Controversies and Transformations</td>
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<td>ETHN 1000Y</td>
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<td>Latina/o Cultural Theory</td>
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<td>AMST 1900K</td>
<td>China in the American Imagination</td>
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<td>Cold War Culture: The American Culture in the Cold War</td>
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<td>Ethnicity, Identity and Culture in 20th Century New York City</td>
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<td>Immigrants, Exiles, Refugees, and Citizens in the Americas</td>
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<tr>
<td>AMST 1900W</td>
<td>Latino Literature: The Shifting Boundaries of Identity</td>
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**Total Credits:** 10

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Students should also be sure to take a methods course.

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<td>ETHN 1870A</td>
<td>Ethnic Los Angeles</td>
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<td>ETHN 1870B</td>
<td>Latino/a Communities Seminar</td>
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<td>Native North Americans in the Media: Representations and Self Representations in Film</td>
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<td>ETHN 1870D</td>
<td>Chicana/o Fiction</td>
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<td>Queer Latina/o Literature and Theory</td>
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<td>Reading Race: Advanced Seminar in Critical Race Theory</td>
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<td>Business, Culture, and Globalization: An Ethnicographic Perspective</td>
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<td>Johnny, Are You Queer: Narratives of Race and Sexuality</td>
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<td>Bad Boys and Bad Girls in Asian American Literature and Culture</td>
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<td>Native American Environmental Health Movements</td>
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<td>Thawing the &quot;Frozen Indian&quot;; American Indian Museum Representation</td>
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</tr>
<tr>
<td>ETHN 1890B</td>
<td>Community, Language and Literacy: A Pradictum</td>
</tr>
<tr>
<td>ETHN 1890C</td>
<td>Contemporary Latino/a Education in the United States</td>
</tr>
<tr>
<td>ETHN 1890D</td>
<td>Latino Communities Seminar</td>
</tr>
<tr>
<td>ETHN 1890E</td>
<td>Senior Seminar in Ethnic Studies</td>
</tr>
<tr>
<td>ETHN 1890F</td>
<td>Theory, Creativity, Activism</td>
</tr>
<tr>
<td>ETHN 1890G</td>
<td>Race and Immigration in the Americas</td>
</tr>
<tr>
<td>ETHN 1890H</td>
<td>What is Ethnic Studies?</td>
</tr>
<tr>
<td>ETHN 1890N</td>
<td>Transpacific Asian American Studies</td>
</tr>
</tbody>
</table>

Any three courses drawn from a list of related courses (as approved by the concentration advisor). A course from the ETHN 1900 series.  

1 Students should also be sure to take a methods course.

Total Credits 10

To be taken in the first semester of the student's final year. The senior seminar is the capstone course and is required of all concentrators.

**Honors**

Candidates for honors must have at least a B+ average in the concentration and be approved by the Concentration Committee. Honors candidates will propose a thesis project to be completed by the end of their final semester. The development of a thesis project will begin during the sixth semester. Honors candidates will have two readers, at least one of whom must be Ethnic Studies core faculty.

Concentrators who choose not to request consideration for honors will be required to complete a major essay or project by the end of their final semester. The essay or project can be the result of major work completed in the senior seminar.

Students seeking information about the Ethnic Studies Program or in need of advising should contact (401-863-7034).

**French and Francophone Studies**

The concentration in French and Francophone Studies is committed to the pursuit of an interdisciplinary, linguistically rigorous, and textually informed understanding of French and Francophone literatures and cultures. Concentrators engage actively through their coursework with a wide range of texts and critical perspectives, pertaining to multiple literary genres, media, and contexts. They have opportunities to study different periods of French history as well as Francophone cultures beyond France. By the time they graduate, concentrators will have learned to read with knowledge and nuance and produced a varied body of critical work in French.

The concentration in French and Francophone Studies is committed to the interdisciplinary and textually informed study of the language, literature, and cultural and critical traditions of the French-speaking world. Concentrators engage actively through their coursework with a wide range of texts and critical perspectives, pertaining to multiple literary genres and media (the novel; theater; poetry; cinema; special topics in contemporary politics and culture). They have opportunities to study different periods of French literature and intellectual history (from the Renaissance to the present) as well as Francophone cultures beyond France (West Africa, the Maghreb and the Caribbean). Courses cover a wide diversity of topics, while placing a shared emphasis on language-specific study, critical writing skills, and the vital place of literature and art for intellectual inquiry.

The concentration program is designed to encourage and support language-specific study. Literary texts and cultural documents are read principally in the original. Likewise, in most courses, French is the language of class discussions, presentations and research/critical papers. Concentrators in French and Francophone Studies are strongly encouraged to spend one or two semesters (usually in their junior year) in France or in a Francophone country to derive the richest benefits of linguistic and cultural immersion. Information on Brown in France and approved alternative programs in French-speaking countries is available from the Office of International Programs (http://www.brown.edu/Administration/OIP) office and the OIP website. Other summer programs can be found on the French Embassy website.

Students who have an outstanding record in their concentration courses, have completed at least six concentration courses by the first semester of their senior year, and are highly recommended by two professors, are eligible to apply for admission to the Honors program (http://www.brown.edu/academics/french-studies/undergraduate/honors-program).

**Concentration Requirements**

A minimum of 10 courses is required for the concentration in French and Francophone Studies. Concentrators must observe following guidelines when planning their concentration. It is recommended that course choices for each semester be discussed with the department’s concentration advisor.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Required Courses

1 series gateway courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 0600</td>
<td>Writing and Speaking French II (is accepted for concentration credit)</td>
</tr>
</tbody>
</table>

#### The senior seminar (senior year spring)

1 course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1900A</td>
<td>Boulevard du crime</td>
</tr>
<tr>
<td>FREN 1900H</td>
<td>La France en guerre</td>
</tr>
</tbody>
</table>

### Electives

Up to two 1000-level courses taught in English by French Studies or other departments at Brown are eligible for concentration credit. (Appropriate courses on French or Francophone topics from other departments must be approved by the concentration advisor. Departments in which electives are typically taken include Africana Studies, Anthropology, Art History, Comparative Literature, English, History, Linguistics, Modern Culture and Media)

At least one course must cover a pre-Revolutionary period.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1000A</td>
<td>Littérature et intertextualité: du Moyen-Age jusqu'à la fin du XVIème s</td>
</tr>
<tr>
<td>FREN 1000B</td>
<td>Littérature et culture: Chevaliers, sorcières, philosophes, et poètes</td>
</tr>
<tr>
<td>FREN 1030A</td>
<td>L'univers de la Renaissance: XVe et XVIe siècles</td>
</tr>
<tr>
<td>FREN 1030B</td>
<td>Le French Renaissance: The Birth of Modernity?</td>
</tr>
<tr>
<td>FREN 1040A</td>
<td>Civicité et littérature</td>
</tr>
<tr>
<td>FREN 1040B</td>
<td>Pouvoirs de la scène: le théâtre du XVIIe siècle</td>
</tr>
<tr>
<td>FREN 1040C</td>
<td>Le Grand Siècle à l'écran</td>
</tr>
<tr>
<td>FREN 1040D</td>
<td>Moi, l'individu et mon monde</td>
</tr>
<tr>
<td>FREN 1050A</td>
<td>&quot;Family Values&quot;: Représentations littéraires de la famille au 18ème siècle</td>
</tr>
<tr>
<td>FREN 1050B</td>
<td>Fictions de l'individu</td>
</tr>
<tr>
<td>FREN 1050C</td>
<td>Le Siècle des Lumières: Culture, Pensée, Société</td>
</tr>
<tr>
<td>FREN 1050D</td>
<td>The Age of Voltaire: Culture, Pensée, Société</td>
</tr>
<tr>
<td>FREN 1050E</td>
<td>French Lovers: Seduction and Libertinage sous l'Ancien Régime</td>
</tr>
<tr>
<td>FREN 1050F</td>
<td>Espace public; espace privé</td>
</tr>
<tr>
<td>FREN 1050G</td>
<td>Le corps des Lumières</td>
</tr>
<tr>
<td>FREN 1050H</td>
<td>The Age of Voltaire: Lumières et modernité</td>
</tr>
<tr>
<td>FREN 1100E</td>
<td>Contes et nouvelles du Moyen Age</td>
</tr>
<tr>
<td>FREN 1100F</td>
<td>Lire et voir la Revolution française</td>
</tr>
<tr>
<td>FREN 1140I</td>
<td>Sorcellerie et Renaissance: le sort de la sorcière</td>
</tr>
<tr>
<td>FREN 1140O</td>
<td>Nous et les autres: Les Français et le monde de la Renaissance à la Révolution</td>
</tr>
</tbody>
</table>

At least one course a post-Revolutionary period

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1130E</td>
<td>Le Poétique et le quotidien</td>
</tr>
<tr>
<td>FREN 1060A</td>
<td>Décadence</td>
</tr>
<tr>
<td>FREN 1060B</td>
<td>Gender and the Novel</td>
</tr>
<tr>
<td>FREN 1060D</td>
<td>L'Orient littéraire</td>
</tr>
<tr>
<td>FREN 1060E</td>
<td>Genre, sexualité, et le roman du XIXe siècle</td>
</tr>
<tr>
<td>FREN 1060F</td>
<td>Paris: Capital of the 19th Century</td>
</tr>
<tr>
<td>FREN 1060G</td>
<td>Boulevard du crime</td>
</tr>
<tr>
<td>FREN 1070A</td>
<td>Avant-Gardes</td>
</tr>
<tr>
<td>FREN 1070B</td>
<td>Emergent literature: Postcolonial Nations and Cultural Identity</td>
</tr>
<tr>
<td>FREN 1070C</td>
<td>Figures du roman français au XX siècle</td>
</tr>
<tr>
<td>FREN 1070D</td>
<td>Le roman français au présent</td>
</tr>
<tr>
<td>FREN 1070E</td>
<td>Littérature, appartenance et identité</td>
</tr>
<tr>
<td>FREN 1070I</td>
<td>Histoires d’animaux</td>
</tr>
<tr>
<td>FREN 1330A</td>
<td>Fairy Tales and Culture</td>
</tr>
<tr>
<td>FREN 1330C</td>
<td>French Women Writers</td>
</tr>
<tr>
<td>FREN 1410A</td>
<td>Des monstres et de l'anormal</td>
</tr>
<tr>
<td>FREN 1410P</td>
<td>Paris et la province : je t’aime, un peu, beaucoup...</td>
</tr>
<tr>
<td>FREN 1410D</td>
<td>L'identité française</td>
</tr>
<tr>
<td>FREN 1410F</td>
<td>Comment peut-on être Français? L'identité française en question</td>
</tr>
<tr>
<td>FREN 1410R</td>
<td>Images d’une guerre sans nom: the Algerian War in Literature and Film</td>
</tr>
<tr>
<td>FREN 1420C</td>
<td>Gender Theory and Politics in France</td>
</tr>
<tr>
<td>FREN 1610C</td>
<td>Advanced Written French: Atelier d'écriture</td>
</tr>
</tbody>
</table>

### Honors

Students who have received all "A’s" in their concentration courses, have completed at least six concentration courses by the first semester of their senior year, and are highly recommended by two professors are eligible to apply for admission to the honors program. For more information, consult the requirements on the Department's website: http://www.brown.edu/academics/french-studies/undergraduate/honors-program

### Gender and Sexuality Studies

Gender and Sexuality Studies is an interdisciplinary concentration that examines the construction of gender and sexuality in social, cultural, political, economic, or scientific contexts. Each concentrator focuses on a well-defined topic or question and works closely with a concentration advisor to develop a program that investigates this focus area rigorously and supplements it with foundational courses in the relevant disciplines.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Typical areas of focus include the acculturation of gender, sexuality and race in American politics or activism, the construction of sexual and gendered identities in educational institutions or in various forms of visual media, a contrast between different cultural understandings of sexual identity, a particular national literature and history. Such topics will frequently bring questions of gender and sexuality together; however students may also organize their concentrations to emphasize questions specifically related to gender or to sexuality. Introductory and methodology courses in the disciplines appropriate to students' focus will help them understand the principles grounding such practices as historical research, literary interpretation, and sociological analysis.

Requirements:
The concentration requires 10 courses, 12 for honors concentrators. No more than two courses may count for multiple concentrations.

1. GNSS 0120. Introductory course on gender and sexuality across the disciplines
2. Four–course focus on some thematic, theoretical, or historical aspect of gender and sexuality
3. Two introductory or methodology courses in disciplines pertinent to the focus
4. One course in gender history, women's history, or history of sexuality
5. One course in feminist theory or theory of sexuality
6. GNSS 1990. A senior seminar which counts as your capstone course. Senior seminar participants are expected to write a research essay. The senior seminar fulfills the second half of Brown’s writing requirement.
7. Prior to Commencement, all graduating senior concentrators are required to give a short presentation of either their senior essay or thesis project.

Honors
Candidates for honors must apply to the program's director at the beginning of their seventh semester. Honors concentrators fulfill the regular requirements plus completing a two–semester thesis as their capstone project.


Geological Sciences
Geological science involves the study of the Earth (and other planetary bodies), including their compositions and histories and the physical chemical and biological processes that shape them. The geosciences are highly interdisciplinary, thus students must take some supporting math and science courses. Geoscience courses emphasize a process-oriented approach, with hands-on experiences in labs and on field trips. There is a strong emphasis on active and collaborative learning, and on practice in communication. Students may choose an AB (total of 13 courses) or an ScB (19 total courses, including one seminar of research). There are many opportunities for students to do research work (typically in paid positions) during the academic year or in the summer, in areas such as deformation and properties of geological materials, deciphering the geologic history of some local rocks, or analysis of planetary images.

Standard program for the A.B. degree
This program provides a broad introduction to the geological sciences. Recommended for students seeking a liberal education and a general understanding of Earth processes and Earth history. Especially attractive for double concentrations, such as geology and economics as a career path to law or business, or geology and English as a career path to journalism or technical writing.

Basic supporting science courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or advanced placement)</td>
<td>1</td>
</tr>
</tbody>
</table>

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II (or more advanced)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 0050</td>
<td>Foundations of Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 0060</td>
<td>Foundations of Electromagnetism and Modern Physics (or more advanced)</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 0040</td>
<td>Dynamics and Vibrations (or more advanced)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems (or more advanced)</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0220</td>
<td>Physical Processes in Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0230</td>
<td>Geochemistry: Earth and Planetary Materials and Processes</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0240</td>
<td>Earth: Evolution of a Habitable Planet</td>
<td>1</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 1410</td>
<td>Mineralogy</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 1420</td>
<td>Petrology</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 1450</td>
<td>Structural Geology</td>
<td>2</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0310</td>
<td>Fossil Record</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 1110</td>
<td>Estuarine Oceanography</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 1240</td>
<td>Stratigraphy and Sedimentation</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 1330</td>
<td>Global Environmental Remote Sensing</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 1350</td>
<td>Weather and Climate</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 1370</td>
<td>Environmental Geochemistry</td>
<td>2</td>
</tr>
</tbody>
</table>

A field course

Select two additional courses from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.

Total Credits 13

Standard program for the Sc.B. degree
This program is recommended for students interested in graduate study and careers in the geosciences and related fields.

Basic supporting science courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
<td>2</td>
</tr>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II (or more advanced)</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or advanced placement)</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following Series:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0050 &amp; PHYS 0060</td>
<td>Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics (or more advanced)</td>
<td>2</td>
</tr>
<tr>
<td>ENGN 0030 &amp; ENGN 0040</td>
<td>Introduction to Engineering and Dynamics and Vibrations (or more advanced)</td>
<td>2</td>
</tr>
</tbody>
</table>

Concentration courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0220</td>
<td>Physical Processes in Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0230</td>
<td>Geochemistry: Earth and Planetary Materials and Processes</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0240</td>
<td>Earth: Evolution of a Habitable Planet</td>
<td>1</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0310</td>
<td>Fossil Record</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1240</td>
<td>Stratigraphy and Sedimentation</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1410</td>
<td>Mineralogy</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1420</td>
<td>Petrology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1450</td>
<td>Structural Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1970</td>
<td>Individual Study of Geologic Problems</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Credits:** 19

1. Advanced placement may be substituted for the first semester of physics.

## Geology-Biology

Geology-Biology involves study of the interactions of the Earth and its hydrosphere and atmosphere with the great diversity of life forms, and how they have evolved and influenced one another over the entire history of the Earth. Many courses emphasize climate and biogeochemistry; this concentration is a good one for students interested in environmental science. Students take a basic suite of geoscience courses and at least 4 bio courses of their choosing, plus some supporting math and science courses; the AB degree requires a total of 14 courses and the ScB degree requires a total of 19, including one semester of research. There is a strong emphasis on active and collaborative learning, and on practice in communication. There are many opportunities for students to do research work (typically in paid positions) during the academic year or in the summer, in areas such as determining the history of climate change during the recent ice age, investigating the causes of major extinctions, and using paleoenvironmental records to determine the vulnerability of different regions of the globe to droughts and other processes that strongly affect society.

### Standard program for the A.B. degree

This program provides a broad introduction to the geologic and biologic processes that shape the Earth and our environment. It is recommended for students seeking a liberal education and a general understanding of Earth processes, including the evolution of climate and the environment, global environmental change and Earth history. The program prepares students for careers in environmental science, geology, ecology, oceanography, and global change.

#### Basic supporting science courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems (or more advanced)</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or advanced placement)</td>
<td>1</td>
</tr>
</tbody>
</table>

Select two courses in mathematics and/or physics at the level of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I (or more advanced)</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 0050</td>
<td>Foundations of Mechanics (or more advanced)</td>
<td></td>
</tr>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering (or more advanced, or courses in data analysis and statistics)</td>
<td></td>
</tr>
</tbody>
</table>

#### Concentration courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0220</td>
<td>Physical Processes in Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0230</td>
<td>Geochemistry: Earth and Planetary Materials and Processes</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0240</td>
<td>Earth: Evolution of a Habitable Planet</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1240</td>
<td>Stratigraphy and Sedimentation</td>
<td>1</td>
</tr>
</tbody>
</table>

Select three Biology courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0390</td>
<td>Vertebrate Evolution and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 0410</td>
<td>Vertebrate Zoology</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits:** 14

### Standard program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in the Earth, Environmental, or Biological Sciences. It is relevant for students interested in environmental science, paleoclimatology, Earth systems science, biogeochemistry, oceanography, or paleobiology.

#### Five basic supporting science courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems (or more advanced)</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or advanced placement)</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0050</td>
<td>Foundations of Mechanics (or more advanced)</td>
<td>1</td>
</tr>
<tr>
<td>or ENGN 0030</td>
<td>Introduction to Engineering</td>
<td></td>
</tr>
</tbody>
</table>

Select two courses in mathematics at the level of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
<td>2</td>
</tr>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II (or more advanced, or advanced courses in data analysis)</td>
<td></td>
</tr>
</tbody>
</table>

#### Fourteen (14) concentration courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0220</td>
<td>Physical Processes in Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0230</td>
<td>Geochemistry: Earth and Planetary Materials and Processes</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0240</td>
<td>Earth: Evolution of a Habitable Planet</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1240</td>
<td>Stratigraphy and Sedimentation</td>
<td>1</td>
</tr>
</tbody>
</table>

Three Biology courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 0390</td>
<td>Vertebrate Evolution and Diversity</td>
<td></td>
</tr>
<tr>
<td>BIOL 0410</td>
<td>Vertebrate Zoology</td>
<td></td>
</tr>
<tr>
<td>BIOL 0415</td>
<td>Microbes in the Environment</td>
<td></td>
</tr>
<tr>
<td>BIOL 0420</td>
<td>Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 0430</td>
<td>The Evolution of Plant Diversity</td>
<td></td>
</tr>
<tr>
<td>BIOL 0440</td>
<td>Inquiry in Plant Biology: Analysis of Plant Growth, Reproduction and Adaptive Responses</td>
<td></td>
</tr>
<tr>
<td>BIOL 0480</td>
<td>Evolutionary Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1470</td>
<td>Conservation Biology</td>
<td></td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Geology-Chemistry

Geochemistry involves two different emphases. Low-temperature geochemistry involves study of chemical and biochemical processes on and near Earth’s surface, including land, oceans and freshwater bodies, and how the geochemical record reflects climate conditions. High-temperature geochemistry includes study of formation and evolution of the Earth and other planets, magma formation and properties, volcanic activity, and metamorphism. The AB degree requires a total of 14 courses, including 5 geoscience courses and 4 chemistry courses, and a few additional courses in math and physics courses. The ScB degree requires a total of 20 courses, including 7 geoscience courses and 4 chemistry courses, plus some supporting math and physics courses. The AB degree requires a total of 14 courses, including 5 geoscience courses and 4 chemistry courses, and a few additional courses in math and physics courses. The ScB degree requires a total of 20 courses, including 7 geoscience courses and 4 chemistry courses, plus some supporting math and physics courses and one research course. Geoscience courses emphasize a process-oriented approach, with hands-on experiences in labs and on field trips. There is a strong emphasis on active and collaborative learning, and on practice in communication. There are many opportunities for students to do research work for pay during the academic year or in the summer, in areas such as experimental studies of magma formation, and analyzing lunar rock samples for water content.

Standard program for the A.B. degree

Recommended for students seeking a liberal education and interested in applying physical and chemical principles toward an understanding of Earth history, Earth processes, and environmental and resource issues.

Basic supporting science courses

Select two courses in mathematics at the level of:

- MATH 0090 Introductory Calculus, Part I (or more advanced)
- MATH 0100 Introductory Calculus, Part II (or more advanced)

Select one of the following series:

- CHEM 0330 Equilibrium, Rate, and Structure
- CHEM 0350 Introductory Physical Chemistry
- CHEM 0360 Introduction to Quantum Chemistry
- CHEM 0370 Basic General Chemistry
- CHEM 0380 Foundations of Chemistry (or a more advanced course, or advanced placement)
- ENGN 0030 Introduction to Engineering

Concentration courses

Select one of the following Series:

- GEOL 1410 & GEOL 1420 Ocean Biogeochemical Cycles and Environmental Geochemistry
- GEOL 1130 & GEOL 1370 Earth: Evolution of a Habitable Planet and Environmental Geochemistry

Two additional courses from upper level geological sciences, math, or supporting sciences with approval from the department concentration advisor.

Total Credits 14

Standard program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in geochemistry and related fields.

Basic Supporting Science Courses:

Select two courses in mathematics at the level of:

- MATH 0090 Introductory Calculus, Part I (or more advanced)
- MATH 0100 Introductory Calculus, Part II (or more advanced)

Select one of the following series:

- PHYS 0050 Foundations of Mechanics
- PHYS 0060 Foundations of Electromagnetism and Modern Physics
- ENGN 0030 Introduction to Engineering
- ENGN 0040 and Dynamics and Vibrations

or a more advanced course

Concentration Courses:

Either the geochemistry/inorganic option or the geochemistry/organic option:

Geochemistry/Inorganic Option:

- GEOL 0220 Physical Processes in Geology
- GEOL 0230 Geochemistry: Earth and Planetary Materials and Processes
- GEOL 0240 Earth: Evolution of a Habitable Planet
- GEOL 1130 Ocean Biogeochemical Cycles
- GEOL 1370 Environmental Geochemistry
- GEOL 1410 Mineralogy
- GEOL 1420 Petrology

Plus one from:

- GEOL 1240 Stratigraphy and Sedimentation
- GEOL 1330 Global Environmental Remote Sensing
- GEOL 1450 Structural Geology

Three from:

- CHEM 0350 Organic Chemistry
- CHEM 0500 Inorganic Chemistry
- CHEM 1060 Advanced Inorganic Chemistry
- CHEM 1140 Physical Chemistry: Quantum Chemistry
- CHEM 1150 Physical Chemistry: Thermodynamics and Statistical Mechanics

Geochemistry/Organic Option:

- GEOL 0220 Physical Processes in Geology
- GEOL 0230 Geochemistry: Earth and Planetary Materials and Processes
- GEOL 0240 Earth: Evolution of a Habitable Planet
- GEOL 1130 Ocean Biogeochemical Cycles
- GEOL 1370 Environmental Geochemistry
- GEOL 1410 Mineralogy

Plus one from:

- GEOL 1240 Stratigraphy and Sedimentation
- GEOL 1330 Global Environmental Remote Sensing

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Geology-Physics/Mathematics

Geophysics involves the application of physics and mathematics to the study of processes that operate on and within the Earth and other planets, over short and long timescales. The AB degree requires a total of 14 courses, including 6 geoscience courses, 3 physics or engineering courses, and 3 math and applied math courses. The ScB degree requires a total of 20 courses, including 8 geoscience courses, 4 physics or engineering courses, and 3 math and applied courses; students can choose courses from both solid Earth geophysics and climate science themes. Geoscience courses emphasize an analytical and process-oriented approach, with hands-on experiences in labs and on field trips. Active and collaborative learning is encouraged, as is practice in written and oral communication. There are many opportunities for students to engage in research (typically in paid positions) during the academic year or in the summer, in areas such as analysis of seismic waves in subduction zones, theoretical modeling of convection in the Earth’s mantle, modeling the effects of the warming climate in the oceans and atmosphere, and remote sensing of how climate change affects vegetation.

Standard program for the A.B. degree

Recommended for students seeking a liberal education and interested in applying physical and mathematical principles toward an understanding of the processes affecting planets, Earth, and the environment and how they are modeled. Some course requirements may be flexible based on consultation with concentration advisor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0220</td>
<td>Physical Processes in Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0250</td>
<td>Computational Approaches to Modelling and Quantitative Analysis in Natural Sciences: An Introduction</td>
<td>1</td>
</tr>
<tr>
<td>or GEOL 0350</td>
<td>Mathematical Methods of Fluid and Solid Geophysics and Geology</td>
<td>1</td>
</tr>
</tbody>
</table>

Four theme courses (choose either the Solid Earth Geophysics Theme or the Climate Science Theme)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0230</td>
<td>Geochemistry: Earth and Planetary Materials and Processes (solid Earth geophysics theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1610</td>
<td>Solid Earth Geophysics (solid Earth geophysics theme)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1410</td>
<td>Mineralogy (solid Earth geophysics theme)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1420</td>
<td>Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1450</td>
<td>Structural Geology (solid Earth geophysics theme)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1620</td>
<td>Continuum Physics of the Solid Earth (solid Earth geophysics theme)</td>
<td>3</td>
</tr>
</tbody>
</table>

And select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 1350</td>
<td>Weather and Climate (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1190</td>
<td>Ocean Biogeochemical Cycles (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1310</td>
<td>Global Water Cycle (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1430</td>
<td>Principles of Planetary Climate (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1510</td>
<td>Introduction to Atmospheric Dynamics (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1520</td>
<td>Ocean Circulation and Climate</td>
<td>1</td>
</tr>
</tbody>
</table>

One additional course from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
<td>3</td>
</tr>
<tr>
<td>or APMA 0340</td>
<td>Methods of Applied Mathematics I, II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or advanced placement)</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Credits: 14

One course cannot be used to satisfy two requirements.

In addition to courses listed elsewhere, in the Geology-Physics/Math concentrations, these courses are of particular relevance:

- GEOL 0810, GEOL 1320, GEOL 1710, GEOL 1960A.

Standard program for the Sc.B. degree

This program is recommended for students interested in graduate study and careers in geophysics, climate science and related fields. Students will be prepared to understand and use models, make measurements, and use theories of the processes studied in these fields. Some course requirements may be flexible based on consultation with concentration advisor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 0220</td>
<td>Physical Processes in Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1430</td>
<td>Principles of Planetary Climate</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1610</td>
<td>Solid Earth Geophysics</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 0250</td>
<td>Computational Approaches to Modelling and Quantitative Analysis in Natural Sciences: An Introduction</td>
<td>1</td>
</tr>
<tr>
<td>or GEOL 0350</td>
<td>Mathematical Methods of Fluid and Solid Geophysics and Geology</td>
<td>1</td>
</tr>
</tbody>
</table>

Five theme courses (choose either the Solid Earth Geophysics theme or the Climate Science Theme):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 1350</td>
<td>Weather and Climate (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1190</td>
<td>Ocean Biogeochemical Cycles (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1310</td>
<td>Global Water Cycle (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1430</td>
<td>Principles of Planetary Climate (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1510</td>
<td>Introduction to Atmospheric Dynamics (climate science theme)</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 1520</td>
<td>Ocean Circulation and Climate</td>
<td>1</td>
</tr>
</tbody>
</table>

Choose one of the following:

- PHYS 0050 Foundations of Mechanics | 1
- PHYS 0070 Analytical Mechanics | 1
- ENGN 0040 Dynamics and Vibrations | 1

Choose one of the following:

- PHYS 0060 Foundations of Electromagnetism and Modern Physics | 1
- ENGN 0310 Mechanics of Solids and Structures | 1
- ENGN 0810 Fluid Mechanics | 1

Choose one of the following:

- PHYS 0470 Electricity and Magnetism | 1
- PHYS 0500 Advanced Classical Mechanics | 1
- PHYS 1600 Computational Physics | 1
- ENGN 0510 Electricity and Magnetism | 1
- ENGN 0810 Fluid Mechanics | 1
- ENGN 1370 Advanced Engineering Mechanics | 1
- GEOL 1820 Geophysical Fluid Dynamics | 1

Total Credits: 14

One course cannot be used to satisfy two requirements.

In addition to courses listed elsewhere, in the Geology-Physics/Math concentrations, these courses are of particular relevance:

- GEOL 0810, GEOL 1320, GEOL 1710, GEOL 1960A.
Solid Earth Geophysics Theme

GEOL 0230 Geochemistry: Earth and Planetary Materials and Processes
GEOL 1450 Structural Geology
GEOL 1620 Continuum Physics of the Solid Earth
And choose two from the following:
GEOL 1410 Mineralogy
GEOL 1420 Petrology
GEOL 1560 Global Tectonics
GEOL 1650 Earthquake Seismology (Climate Science Theme)

Or a field course

Climate Science Theme

GEOL 0240 Earth: Evolution of a Habitable Planet
Choose one:
GEOL 1510 Introduction to Atmospheric Dynamics
GEOL 1520 Ocean Circulation and Climate
And choose three from the following: 1
GEOL 1130 Ocean Biogeochemical Cycles
GEOL 1310 Global Water Cycle
GEOL 1330 Global Environmental Remote Sensing
GEOL 1510 Introduction to Atmospheric Dynamics
GEOL 1520 Ocean Circulation and Climate
Or a field or sea course

PHYS 0050 Foundations of Mechanics 1
or PHYS 0070 Analytical Mechanics
or ENGN 0040 Dynamics and Vibrations
PHYS 0060 Foundations of Electromagnetism and Modern Physics
or ENGN 0310 Mechanics of Solids and Structures
or ENGN 0810 Fluid Mechanics
Select two of the following: 1,2 2
PHYS 0470 Electricity and Magnetism
PHYS 0500 Advanced Classical Mechanics
PHYS 1600 Computational Physics
ENGN 0510 Electricity and Magnetism
ENGN 0810 Fluid Mechanics
ENGN 1370 Advanced Engineering Mechanics
GEOL 1820 Geophysical Fluid Dynamics
Three courses in mathematics including
APMA 0330 Methods of Applied Mathematics I, II
or APMA 0340 Methods of Applied Mathematics I, II
Two additional courses from upper level geological sciences, mathematics, or supporting sciences with approval from the departmental concentration advisor.
CHEM 0330 Equilibrium, Rate, and Structure
GEOL 1970 Individual Study of Geologic Problems

Total Credits 20

1 One course cannot be used to satisfy two requirements
2 ENGN 0810 or GEOL 1820 are recommended for those completing the Climate Science theme.
3 In addition to courses listed elsewhere, in the Geology-Physics/Math concentrations, these courses are of particular relevance:
GEOL 0810, GEOL 1320, GEOL 1710, GEOL 1960A.

German Studies

German Studies exposes students to the language, literature, and culture of the German speaking areas of Central Europe. Concentrators combine intensive study of the German language with interdisciplinary studies by complementing courses from the German Studies core program with courses from other departments that deal with topics from the German cultural tradition. The quest for national identity that dominated German history in the nineteenth and twentieth centuries has been augmented by contemporary Germany’s efforts to come to terms with its past and create new ways of dealing with diversity. Our curriculum therefore looks back at the German literary, cultural, and historical tradition, examining figures from Goethe and Christa Wolf to Marx, Freud, Nietzsche, and Heidegger, alongside the “texts” of contemporary German media, including television, film, and music. Most concentrators study abroad for one or two semesters.

*In spring 2017, Professor Jane Sokolosky will serve as concentration advisor. Professor Kristina Mendicino will return as concentration advisor in fall 2017.

Standard program for the A.B. degree

Many students elect to complete a double concentration, combining German Studies with one of the above areas, or with fields such as International Relations or Economics, Comparative Literature or History of Art and Architecture.

Knowledge of the German language is not required for declaring a concentration in German Studies. However, since language fluency is the basis for sophisticated understanding of German culture, students must meet a language requirement by the time they graduate.

Concentration Requirements

- Nine courses beyond GRMN 0400 or GRMN 0450:
- At least six of the nine courses must be at the 1000-level (or higher);
- Two of the 1000-level courses must involve writing assignments in German, and students must obtain at least a grade of B in these courses;
- At least five of the nine courses must be taken in the Department of German Studies (or four if a student spends a whole year in Germany on Study Abroad);
- Completion of a Senior Seminar during the senior year (i.e. a course from the German Studies 1900 series) as part of the five courses within the Department of German Studies; and
- If a student studies abroad for one semester, as many as four courses, in the case of two semesters, as many as five courses, from study abroad may count toward the concentration.

Honors

Candidates for honors will be expected to have a superior record in departmental courses and will have to be approved by the Department of German Studies. Honors candidates must take one additional course at the 1000-level from the German studies offerings and present an acceptable Senior Honors Thesis. The additional course may be used for preparation of the honors thesis. Students are encouraged to discuss their thesis topics with the concentration advisor no later than the third week of classes in Fall of their Senior year.

Health & Human Biology

Health and Human Biology is an interdisciplinary concentration that provides a rigorous foundation in the biological sciences with substantive course work in humanities and social sciences within a subfield of Human Health and Disease. The program includes: background courses, biology core courses, a set of theme courses, and a Senior Capstone activity. Background courses provide the essential foundations in chemistry, mathematics, methods, and basic biology. These support the Biology core, which is comprised of a flexible menu of intermediate and advanced courses. A required portion of the Biology core is Genetics, a cornerstone of human biology and its interface with other fields. The Biology core underscores the related coursework within the Health and Disease Theme. The Theme courses are social science and humanities courses that form a cohesive, thoughtful grouping. Theme groupings must be approved by the advisor. A required senior capstone course or activity builds on the program’s focus.

Program Requirements

REQUIRED BACKGROUND:

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### SENIOR CAPSTONE ACTIVITY: Must be conducted during the senior year, fulfilled by one of the following, and related to the student's chosen theme:

1. Advisor approved senior seminar or advanced course related to the theme.
2. One semester of independent research/independent study (BIOL 1950 or BIOL 1960); in the case of a senior honors thesis, both BIOL 1950 and BIOL 1960 can be used as the capstone.
3. An appropriate internship with a scholarly context can be used if coupled with a semester of independent study mentored by a Brown faculty member.

| Total Credits | 14 |

### THEME:
- Approved courses must be above the introductory level and at least one must be 1000-level or above.
- No more than TWO courses from a given department may be included in the theme portion.
- NOTE: Beginning with the Class of 2020: Health Systems, Structure and Policy and Women's/Children Health will be eliminated.
- Students will then select from FOUR theme options: 1) Health Behavior, 2) Environmental Health, 3) Global/International Health, 4) Social Context of Health and Disease.

### HONORS: See more information about Honors at http://www.brown.edu/academics/biology/undergraduate-education/.

### Hispanic Literatures and Culture
Spanish is the second most widely spoken language in the world and the second language of the United States. In our society, knowing Spanish is not just an asset; it is increasingly a necessity. The Spanish language program offers a sequence of courses ranging from basic to advanced. Students at all levels develop proficiency in speaking, listening, reading, and writing while also studying the cultures and societies of the contemporary Spanish-speaking world. The Hispanic Literatures and Culture concentration enables students to develop advanced Spanish skills while acquiring a solid background in the complex history, literature, cultures, and intellectual traditions of Spain, Latin America, and the Latino-U.S. The department offers a variety of courses on topics related to literary history and theory; multicultural contact; linguistics and the history of the language; visual culture, film, and performance studies. Interdisciplinarity is a hallmark of the department, and students in this concentration are encouraged to broaden their perspectives by taking relevant courses in other departments. Most choose to strengthen their academic preparation by participating in a study abroad program in Spain or Latin America and by engaging with Hispanic communities in the United States.

The concentration requires a minimum of ten courses. 700-level courses provide fundamental tools for critical analysis and opportunities for developing advanced skills in the Spanish language. In courses at the 1000 level, students explore particular authors, genres, periods, or special topics and continue to hone their skills in literary and cultural analysis.

### Prerequisite
HISP 0600 Advanced Spanish II (Pre-requisite)

### Required courses: one of the following 0700 level courses
HISP 0730 Encounters: Latin America in Its Literature and Culture
HISP 0740 Intensive Survey of Spanish Literature
HISP 0760 Transatlantic Crossings: Readings in Hispanic Literatures

### For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Up to two more 0700 level courses including, additionally:
HISP 0710 Culture and Advanced Spanish Language (any course in the series)
HISP 0750 Topics in Hispanic Culture/Civilization (any course in the series)

Elective Courses
Select at least three 1000-level courses in Hispanic Studies at Brown. These provide more specialized preparation in major areas of Hispanic Studies, including works and topics from across the centuries and pertaining to both Spain and Latin America. Concentrators must take at least six courses (at either the 0700 or 1000 level, with a maximum of three 0700 level courses) in Hispanic Studies at Brown, including one with the WRIT designation.

Concentrators are reminded that up to four related courses from Study Abroad, transfer credit, and other departments at Brown (e.g., Comparative Literature, History, Ethnic Studies, Anthropology) may be applied toward the concentration in Hispanic Studies as long as they deal with Spanish or Latin American themes and/or Peninsular or Latin American culture. While there is a list of acceptable related Brown courses on the Hispanic Studies website, individual courses may be discussed with the Concentration Advisor on a case by case basis. Please note that a maximum of two courses for the concentration can be taken in English, and one course can be taken S/NC. Students planning to pursue honors in the concentration must take all courses for a grade.

Total Credits = 10

E-Portfolio: As their capstone work, all Hispanic Studies concentrators must complete an E-Portfolio in ASK in their last year of studies. We encourage you to share your written work, your projects, and your reflections on concentration-related experiences (study abroad, community work, internships, etc.) with the wider public at Brown and beyond, but only as you see fit.

Honors Thesis or Project
Students with an excellent record in their Hispanic Studies courses will be eligible to write an Honors Thesis or write and produce an Honors Project. Typically the Honors Thesis is a major research paper of approximately 40 to 80 pages in Spanish, depending on the topic and treatment necessary. Alternatively, a student may, with prior permission of the Hispanic Studies Concentration Advisor, present a film, gallery exhibition, or other appropriate project, together with a paper that clearly demonstrates the academic foundations and relevance of the project. For additional details regarding Honors Thesis in Hispanic Studies, please refer to our website or consult with the Concentration Advisor.

Concentration Advisor:
Silvia Sobral

History
History is the study of how societies and cultures across the world change over time. History concentrators learn to write and think critically, and to understand issues from a variety of perspectives. The department offers a wide variety of courses concerned with changes in human experience through time, ranging from classical Greek and Roman civilizations to the histories of Europe, the Americas, and Asia. While some courses explore special topics, others concentrate on the history of a particular country (e.g., Russia or France) or period of time (e.g. the Middle Ages or the Renaissance). By taking advantage of our diverse course offerings, students can engage in and develop broad perspectives on the past and the present.

Concentration Requirements
1. Basic Requirement: A concentration in History consists of a minimum of ten semester-long courses; of these, at least eight must be offered by the Brown University History Department, including cross-listed courses.

(Students who spend more than one semester at another institution, must take at least 7 HIST courses - see "Transferring Courses" below.)

2. Courses below 1000: Students may count no more than four courses numbered below 1000 toward the concentration requirements. Students considering a concentration in History are encouraged to take First Year and Sophomore seminars, as well as courses in the HIST 0150 and 0200 series, for an introduction to historical reasoning, discussion, and writing.

3. Field of Focus: Upon declaring a concentration in History, students must define the area that will be the primary focus of their program. The primary field of focus must include a minimum of four courses. Students who choose a geographical focus must provide a thematic or chronological rationale for the coherence of courses with a broad chronological span. Students who are interested in a thematic or transnational focus (such as Science, Technology, Environment and Medicine or the Ancient World) may include courses from different geographic areas. All students should consult a concentration advisor early in the process. All fields are subject to approval by the concentration advisor.

4. Geographical Distribution: Concentrators must take at least two courses in three different geographic areas. These are:
   - Africa
   - East Asia
   - Europe
   - Global
   - Latin America and the Caribbean
   - Middle East and South Asia
   - North America

   “Global” courses are defined as those that deal with at least three different regions of the world.

For details on which courses count toward which geographical distribution requirement click here (https://docs.google.com/spreadsheets/d/1NT5f7zAzqXDCivZxTdsdceSmD5v28ke6550tnBrmE/edit?#gid=2138711521)

5. Chronological Distribution: All concentrators must complete at least two courses designated as “P” (for pre-modern).

For a listing of which courses count as “P” courses click here

6. Capstone Seminar: All concentrators must complete at least one capstone seminar (these will be HIST 1960s and HIST 1970s series courses in the new numbering system.) These seminars are designed to serve as an intellectual culmination of the concentration. They provide students with an opportunity to delve deeply into a historical problem and to write a major research and/or analytical paper which serves as a capstone experience. Ideally, they will be taken in the field of focus and during the student’s junior or senior year. Students considering writing a senior honors thesis are advised to take an advanced seminar in their junior year.

7. Transferring Courses: The History Department encourages students to take history courses at other institutions, either in the United States or abroad, as well as history-oriented courses in other departments and programs at Brown. Students may apply two courses taken in other departments/programs at Brown to the ten-course minimum for the History concentration. Students who spend one semester at another institution may apply to their concentration a maximum of two courses from other departments or institutions, and those who spend more than one semester at another institution may apply to their concentration a third course transferred from another institution.

Students wishing to apply such courses must present to their concentration advisor justification that those courses complement some aspect of their concentration. Courses from other Brown departments may not be applied toward the chronological distribution requirement; courses transferred from other institutions may be applied toward the chronological distribution requirement so long as they clearly are history courses.

It is normally expected that students will have declared their intention to concentrate in History and have their concentration programs approved before undertaking study elsewhere. Brown-run programs abroad automatically receive University transfer credit, but concentration credit is granted only with the approval of a concentration advisor. Students taking courses in other foreign-study programs or at
other universities in the United States must apply to the Transfer Credit Advisor.

8. Regular Consultation: Students are strongly urged to consult regularly with their concentration advisor or a department advisor about their program. During the seventh semester, all students must meet with their concentration advisor for review and approval of their program.

**COURSES BELOW 1000**

### LECTURE COURSES

**150's: Thematic Courses that Cut Across Time and Place**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>HIST 0150A</td>
<td>History of Capitalism</td>
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<tr>
<td>HIST 0150B</td>
<td>The Philosophers' Stone: Alchemy From Antiquity to Harry Potter</td>
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<tr>
<td>HIST 0150C</td>
<td>Locked Up: A Global History of Prison and Captivity</td>
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<tr>
<td>HIST 0150D</td>
<td>Refugees: A Twentieth-Century History</td>
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<td>HIST 0150F</td>
<td>Pirates</td>
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<td>HIST 0150G</td>
<td>History of Law: Great Trials</td>
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<td>HIST 0150H</td>
<td>Foods and Drugs in History</td>
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**Gateway Lecture Courses**

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<tr>
<td>HIST 0203</td>
<td>Modern Africa</td>
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<tr>
<td>HIST 0212</td>
<td>Histories of East Asia: China</td>
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<tr>
<td>HIST 0214</td>
<td>Histories of East Asia: Japan</td>
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<tr>
<td>HIST 0215</td>
<td>Modern Korea: Contending with Modernity</td>
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<td>HIST 0218</td>
<td>The Making of Modern East Asia</td>
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<td>HIST 0228A</td>
<td>War and Peace in Modern Europe</td>
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<td>HIST 0232</td>
<td>Clash of Empires in Latin America</td>
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<td>HIST 0233</td>
<td>Colonial Latin America</td>
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<td>HIST 0234</td>
<td>Modern Latin America</td>
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<tr>
<td>HIST 0243</td>
<td>Modern Middle East Roots: 1492 to the Present</td>
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<td>HIST 0244</td>
<td>Understanding the Middle East: 1800s to the Present</td>
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<td>HIST 0247</td>
<td>Civilization, Empire, Nation: Competing Histories of the Middle East</td>
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<td>HIST 0250</td>
<td>American Exceptionalism: The History of an Idea</td>
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<td>HIST 0252</td>
<td>The American Civil War</td>
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<td>HIST 0253</td>
<td>Religion, Politics, and Culture in America, 1865 - Present</td>
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<td>HIST 0257</td>
<td>Modern American History: New and Different Perspectives</td>
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<td>HIST 0270A</td>
<td>From Fire Wielders to Empire Builders: Human Impact on the Global Environment before 1492</td>
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<td>HIST 0270B</td>
<td>From the Columbian Exchange to Climate Change: Modern Global Environmental History</td>
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<td>HIST 0273A</td>
<td>The First Globalization: The Portuguese in Africa, Asia, and the Americas</td>
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<td>HIST 0276</td>
<td>A Global History of the Atomic Age</td>
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<td>HIST 0276B</td>
<td>Science and Capitalism</td>
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<td>HIST 0285A</td>
<td>Modern Genocide and Other Crimes against Humanity</td>
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<td>HIST 0286A</td>
<td>History of Medicine I: Medical Traditions in the Old World Before 1700</td>
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<td>HIST 0286B</td>
<td>History of Medicine II: The Development of Scientific Medicine in Europe and the World</td>
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**SEMINAR COURSES**

**First-Year Seminars**

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<tr>
<th>Course Code</th>
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<tr>
<td>HIST 0505</td>
<td>Africa and the Transatlantic Slave Trade</td>
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<tr>
<td>HIST 0510A</td>
<td>Shanghai in Myth and History</td>
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**Sophomore Seminars**

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<th>Course Code</th>
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<tr>
<td>HIST 0621B</td>
<td>The Search for King Arthur</td>
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<tr>
<td>HIST 0623A</td>
<td>British Social History</td>
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<tr>
<td>HIST 0623M</td>
<td>Becoming French: Minorities and the Challenges of Integration in the French Republic</td>
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<td>HIST 0637A</td>
<td>History of Jews in Brazil</td>
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<td>HIST 0654A</td>
<td>Welfare States and a History of Modern Life</td>
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<td>HIST 0654B</td>
<td>American Patriotism in Black and White</td>
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<tr>
<td>HIST 0658D</td>
<td>Walden + Woodstock: The American Lives of Ralph Waldo Emerson and Bob Dylan</td>
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<tr>
<td>HIST 0685A</td>
<td>The Social Lives of Dead Bodies in China and Beyond</td>
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**COURSES WITH NUMBERS 1000-1999**

**LECTURE COURSES**

<table>
<thead>
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<th>Course Code</th>
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<tr>
<td>HIST 1030</td>
<td>South African History</td>
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<tr>
<td>HIST 1060</td>
<td>Africa, c.1850-1946: Colonial Contexts and Everyday Experiences</td>
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<tr>
<td>HIST 1070</td>
<td>&quot;Modern&quot; Africa</td>
</tr>
<tr>
<td>HIST 1101</td>
<td>Chinese Political Thought from Confucius to Xi Jinping</td>
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</tbody>
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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Undergraduate Concentrations

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).

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<tr>
<td>HIST 1080</td>
<td>Humanitarianism and Conflict in Africa</td>
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<tr>
<td>HIST 1110</td>
<td>Imperial China/China: Culture and Legacy</td>
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<td>HIST 1118</td>
<td>China's Late Empires</td>
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<td>HIST 1121</td>
<td>The Modern Chinese Nation: An Idea and Its Limits</td>
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<td>HIST 1122</td>
<td>China Pop: The Social History of Chinese Popular Culture</td>
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<td>HIST 1140</td>
<td>Samurai and Merchants, Prostitutes and Priests: Japanese Urban Culture in the Early Modern Period</td>
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<td>HIST 1149</td>
<td>Imperial Japan</td>
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<td>HIST 1150</td>
<td>Modern Japan</td>
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<tr>
<td>HIST 1155</td>
<td>Japan's Pacific War: 1937-1945</td>
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<td>HIST 1200B</td>
<td>The Fall of Empires and Rise of Kings: Greek History to 478 to 323 BCE</td>
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<td>HIST 1200C</td>
<td>History of Greece: From Alexander the Great to the Roman Conquest</td>
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<td>HIST 1201A</td>
<td>Roman History I</td>
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<td>HIST 1201B</td>
<td>Roman History II: The Empire</td>
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<td>HIST 1202</td>
<td>Formation of the Classical Heritage: Greeks, Romans, Jews, Christians, and Muslims</td>
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<td>HIST 1205</td>
<td>The Long Fall of the Roman Empire</td>
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<td>HIST 1210A</td>
<td>The Viking Age</td>
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<td>HIST 1211</td>
<td>Crusaders and Cathedrals, Deviants and Domination: Europe in the High Middle Ages</td>
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<td>HIST 1212</td>
<td>Charlemagne and the Making of Medieval Europe</td>
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<td>HIST 1230A</td>
<td>Revolution and Romanticism in 19th century Europe</td>
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<tr>
<td>HIST 1230B</td>
<td>Modern European Intellectual and Cultural History: The Fin de Siecle, 1880-1914</td>
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<td>HIST 1230C</td>
<td>The Search for Renewal in 20th century Europe</td>
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<td>HIST 1235A</td>
<td>Modern European Women + Gender History</td>
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<td>HIST 1240A</td>
<td>Politics of Violence in 20C Europe</td>
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<td>HIST 1260D</td>
<td>Living Together: Muslims, Christians, and Jews in Medieval Iberia</td>
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<td>HIST 1262M</td>
<td>Truth on Trial: Justice in Italy, 1400-1800</td>
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<td>HIST 1266C</td>
<td>English History, 1529-1660</td>
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<td>HIST 1266D</td>
<td>British History, 1660-1800</td>
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<td>HIST 1268A</td>
<td>The Rise of the Russian Empire</td>
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<td>HIST 1268B</td>
<td>Russia in the Era of Reforms, Revolutions, and World Wars</td>
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<td>HIST 1268C</td>
<td>The Collapse of Socialism and the Rise of New Russia</td>
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<td>HIST 1270C</td>
<td>German History, 1806-1945</td>
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<td>HIST 1272C</td>
<td>Liberty, Equality, Fraternity? The History of Modern France</td>
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<td>The French Revolution</td>
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<td>HIST 1310</td>
<td>History of Brazil</td>
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<td>HIST 1312</td>
<td>Brazil: From Abolition to Emerging Global Power</td>
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<td>HIST 1313</td>
<td>Brazilian Biographies</td>
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<td>HIST 1320</td>
<td>Rebel Island: Cuba, 1492-Present</td>
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<td>HIST 1331</td>
<td>The Rise and Fall of the Aztecs: Mexico, 1300-1600</td>
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<td>HIST 1332</td>
<td>Reform and Rebellion: Mexico, 1700-1867</td>
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<td>HIST 1333</td>
<td>The Mexican Revolution</td>
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<td>HIST 1370</td>
<td>The United States and Brazil: Tangled Relations</td>
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<td>HIST 1381</td>
<td>Latin American History and Film: Memory, Narrative and Nation</td>
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<td>HIST 1440</td>
<td>The Ottomans: Faith, Law, Empire</td>
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<td>HIST 1455</td>
<td>The Making of the Modern Middle East</td>
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<td>HIST 1460</td>
<td>Modern Turkey: Empire, Nation, Republic</td>
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<td>HIST 1501</td>
<td>The American Revolution</td>
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<td>HIST 1503</td>
<td>Antebellum America and the Road to Civil War</td>
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<td>HIST 1505</td>
<td>Making America Modern</td>
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<td>HIST 1507</td>
<td>American Politics and Culture Since 1945</td>
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<td>HIST 1511</td>
<td>Sinners, Saints, and Heretics: Religion in Early America</td>
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<td>HIST 1512</td>
<td>First Nations: The People and Cultures of Native North America to 1800</td>
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<td>HIST 1513</td>
<td>U.S. Cultural History from Revolution to Reconstruction</td>
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<td>HIST 1514</td>
<td>Capitalism, Slavery and the Economy of Early America</td>
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<td>HIST 1515</td>
<td>American Slavery</td>
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<td>HIST 1530</td>
<td>The Intimate State: The Politics of Gender, Sex, and Family in the U.S., 1873-Present</td>
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<td>HIST 1531</td>
<td>Political Movements in Twentieth-Century America</td>
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<td>HIST 1532</td>
<td>Black Freedom Struggle Since 1945</td>
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<td>HIST 1550</td>
<td>American Urban History, 1600-1870</td>
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<td>HIST 1551</td>
<td>American Urban History, 1870-1965</td>
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<td>HIST 1553</td>
<td>Empires in America to 1890</td>
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<td>HIST 1554</td>
<td>American Empire Since 1890</td>
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<td>HIST 1570</td>
<td>American Legal and Constitutional History</td>
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<td>HIST 1640</td>
<td>Inequality + Change: South Asia after 1947</td>
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<td>HIST 1735</td>
<td>Slavery in the Early Modern World</td>
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<td>HIST 1740</td>
<td>Capitalism, Land and Water: A World History: 1350-1848</td>
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<td>HIST 1741</td>
<td>Capitalism, Land and Water: A World History: 1848 to the present</td>
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<td>Environmental History</td>
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<td>Environmental History of East Asia</td>
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<td>HIST 1820G</td>
<td>Nature on Display</td>
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<td>HIST 1825F</td>
<td>Nature, Knowledge, Power in Renaissance Europe</td>
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<tr>
<td>HIST 1825H</td>
<td>Science, Medicine and Technology in the 17th Century</td>
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<td>HIST 1825L</td>
<td>The Roots of Modern Science</td>
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<td>HIST 1825M</td>
<td>Science at the Crossroads</td>
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<td>HIST 1825S</td>
<td>Science and Capitalism</td>
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<tr>
<td>HIST 1830M</td>
<td>From Medieval Bedlam to Prozac Nation: Intimate Histories of Psychiatry and Self</td>
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### SEMINAR COURSES

**Capstone Seminars**

- HIST 1960Q: Medicine and Public Health in Africa
- HIST 1961B: Cities and Urban Culture in China
- HIST 1961E: Medieval Kyoto - Medieval Japan
- HIST 1961I: North Korea: Past, Present, Future
- HIST 1961M: Outside the Mainstream
- HIST 1962B: Life During Wartime: Theory and Sources from the Twentieth Century
- HIST 1962C: State, Religion and the Public Good in Modern China
<table>
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<td>HIST 1962D</td>
<td>The Social Lives of Dead Bodies in China and Beyond</td>
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<tr>
<td>HIST 1963G</td>
<td>Crisis and Social Justice at the End of Antiquity</td>
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<tr>
<td>HIST 1963L</td>
<td>Barbarians, Byzantines, and Berbers: Early Medieval North Africa, AD 300-1050</td>
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<tr>
<td>HIST 1963M</td>
<td>Charlemagne: Conquest, Empire, and the Making of the Middle Ages</td>
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<tr>
<td>HIST 1963Q</td>
<td>Sex, Power, and God: A Medieval Perspective</td>
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<td>HIST 1964A</td>
<td>Age of Impostors: Fraud, Identification, and the Self in Early Modern Europe</td>
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<tr>
<td>HIST 1964B</td>
<td>The Enchanted World: Magic, Angels, and Demons in Early Modern Europe</td>
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<td>HIST 1964D</td>
<td>Women in Early Modern England</td>
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<td>HIST 1964E</td>
<td>The English Revolution</td>
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<td>HIST 1964F</td>
<td>Early Modern Ireland</td>
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<td>HIST 1964G</td>
<td>Spin, Terror and Revolution: England, Scotland and Ireland, 1660-1720</td>
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<td>HIST 1965B</td>
<td>Fin-de-Siècle Paris and Vienna</td>
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<td>HIST 1965C</td>
<td>Stalinism</td>
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<td>HIST 1965D</td>
<td>The USSR and the Cold War</td>
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<td>HIST 1965E</td>
<td>Politics of the Intellectual in 20C Europe</td>
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<td>HIST 1965L</td>
<td>Appetite for Greatness: Cuisine, Power, and the French</td>
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<td>HIST 1965M</td>
<td>Double Fault! Race and Gender in Modern Sports History</td>
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<tr>
<td>HIST 1965N</td>
<td>&quot;Furies from Hell&quot; to &quot;Femi-Nazis&quot;: A History of Modern Anti-Feminism</td>
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<td>HIST 1965O</td>
<td>She's So Chic! Fashion, Gender, and Nationalism in French History</td>
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<td>HIST 1965Q</td>
<td>Anti-Semitism, Anti-Judaism, Anti-Zionism: Historical Connections and Disconnections</td>
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<td>HIST 1965R</td>
<td>The Monarch in Modern Britain: Constitution and Celebrity</td>
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<td>HIST 1966Q</td>
<td>Colonial Encounters and the Creation of Latin America</td>
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<td>Making Revolutionary Cuba, 1959-Present</td>
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<td>HIST 1967E</td>
<td>In the Shadow of Revolution: Mexico Since 1940</td>
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<td>HIST 1967F</td>
<td>The Maya in the Modern World</td>
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<td>HIST 1967R</td>
<td>History of Rio de Janeiro</td>
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<td>HIST 1967T</td>
<td>History of the Andes from the Incas to Evo Morales</td>
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<td>HIST 1968A</td>
<td>Approaches to The Middle East</td>
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<td>HIST 1968K</td>
<td>The Ottomans: Faith, Law, Empire</td>
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<td>HIST 1968V</td>
<td>America and the Middle East: Social and Cultural Histories in Tandem</td>
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<td>HIST 1969A</td>
<td>Israel-Palestine: Lands and Peoples I</td>
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<td>Israel-Palestine: Lands and Peoples II</td>
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<td>Debates in Middle Eastern History</td>
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<td>HIST 1969D</td>
<td>Palestine versus the Palestinians</td>
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<td>HIST 1969F</td>
<td>Nothing Pleases Me: Understanding Modern Middle Eastern History Through Literature</td>
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<td>HIST 1970B</td>
<td>Enslaved! Indians and Africans in an Unfree Atlantic World</td>
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<td>Problem of Class in Early America</td>
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<td>HIST 1971D</td>
<td>From Emancipation to Obama</td>
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<td>HIST 1972A</td>
<td>American Legal History, 1760-1920</td>
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<td>HIST 1972E</td>
<td>Theory and Practice of Local History</td>
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<td>HIST 1972F</td>
<td>Consent: Race, Sex, and the Law</td>
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<td>Settler Colonialism + US Military Empire in the Pacific</td>
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<td>HIST 1974A</td>
<td>The Silk Roads, Past and Present</td>
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<td>HIST 1974B</td>
<td>War and Peace: A Global History</td>
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<td>HIST 1974J</td>
<td>Decolonizing Minds: A People's History of the World</td>
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<tr>
<td>HIST 1974K</td>
<td>Maps and Empires</td>
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<td>HIST 1974M</td>
<td>Early Modern Globalization</td>
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<td>HIST 1974S</td>
<td>The Nuclear Age</td>
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<td>HIST 1976A</td>
<td>Native Histories in Latin America and North America</td>
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<td>HIST 1976C</td>
<td>Animal, Vegetable, Mineral: Environmental Histories of Non-Human Actors</td>
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<td>HIST 1976D</td>
<td>Powering the Past: The History of Energy</td>
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<tr>
<td>HIST 1976E</td>
<td>The Anthropocene: Climate Change as Social History</td>
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<td>HIST 1976G</td>
<td>Animal Histories</td>
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<td>HIST 1976H</td>
<td>Environmental History of Latin America 1492-Present</td>
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<tr>
<td>HIST 1976I</td>
<td>The World of Isaac Newton</td>
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<tr>
<td>HIST 1976N</td>
<td>Topics in the History of Economic Thought</td>
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<tr>
<td>HIST 1976R</td>
<td>Histories of the Future</td>
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<tr>
<td>HIST 1977B</td>
<td>Feathery Things: An Avian Introduction to Animal Studies</td>
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<td>HIST 1977I</td>
<td>Gender, Race, and Medicine in the Americas</td>
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<td>HIST 1979J</td>
<td>London: 1750 to the Present</td>
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<td>HIST 1979K</td>
<td>The Indian Ocean World</td>
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<td>HIST 1979L</td>
<td>Urban History of Latin America</td>
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<td>HIST 1979M</td>
<td>Piracy, Patents and Intellectual Property</td>
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<td>HIST 1979N</td>
<td>American Charters</td>
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<td>HIST 1979O</td>
<td>Comparative Black Power</td>
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<tr>
<td>HIST 1979P</td>
<td>History of Chinese Medicine</td>
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<tr>
<td>HIST 1979Q</td>
<td>Japanese Film and Animation of the 20th Century</td>
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<tr>
<td>HIST 1979R</td>
<td>Scientific Controversies from Creationism to Climate Change</td>
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<tr>
<td>HIST 1979S</td>
<td>History of Life Itself: Biopolitics in Modern Europe</td>
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<tr>
<td>HIST 1979T</td>
<td>Modernism and Its Critics</td>
</tr>
<tr>
<td>HIST 1979U</td>
<td>The Business of Empire: History of Capitalism and U.S. Foreign Relations, 1900 to the Present</td>
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<tr>
<td>HIST 1979V</td>
<td>Technologies of the Soul: The History of Healing</td>
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<tr>
<td>HIST 1979W</td>
<td>Debates on the Holocaust</td>
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<tr>
<td>HIST 1979X</td>
<td>Modern Enchantments: Science, Religion, and Magic in Modernizing America</td>
</tr>
<tr>
<td>HIST 1979Y</td>
<td>Peace, Justice and Human Rights in a Global Age</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>HIST 1979Z</td>
<td>The World in Revolution: America and the Global South during the Long 1970s</td>
</tr>
<tr>
<td>HIST 1990</td>
<td>Undergraduate Reading Courses</td>
</tr>
<tr>
<td>HIST 1992</td>
<td>History Honors Workshop for Prospective Thesis Writers</td>
</tr>
<tr>
<td>HIST 1993</td>
<td>History Honors Workshop for Thesis Writers, Part I</td>
</tr>
<tr>
<td>HIST 1994</td>
<td>History Honors Workshop for Thesis Writers, Part II</td>
</tr>
</tbody>
</table>

**Honors (OPTIONAL):**

History concentrators in the 5th or 6th semester may apply for honors. To be admitted, students must have achieved two-thirds “quality grades” in History department courses. A “quality grade” is defined as a grade of “A” or a grade of “S” accompanied by a course performance report indicating a performance at the “A” standard. Students who wish to enroll in honors are recommended to take HIST 1992, “History Honors Workshop for Prospective Students.” Students who complete honors may count HIST 1992 as one of the 10 courses required for graduation in history. HIST 1992 students who prepare a prospectus that receives a grade of A- or above will be admitted to the honors program. Students in their 7th semester who have not taken HIST 1992 (including but not limited to those who are away from Brown during that semester) may apply to the program by submitting a prospectus no later than the first day of that semester. All honors students must complete one semester of HIST 1993 “History Honors Workshop for Thesis Writers, Part I” and one semester of HIST 1994 “History Workshop for Thesis Writers, Part II.” Students who contemplate enrolling in the honors program in History should consult the honors section of the department website. They are also encouraged to meet with the Director of Undergraduate Studies, who serves as the honors advisor.

**History of Art and Architecture**

The concentration in History of Art and Architecture introduces students to the history of art, architecture, and visual culture. Students in HIAA explore Western and non-Western areas ranging over a wide period of time (Ancient, Medieval, Islamic, East Asian, Latin American, Early Modern, Modern/Contemporary). Concentrators often focus on a particular period (e.g., ancient, modern architecture), a particular branch of the field (e.g., urbanism), or a methodology (e.g., semiotics, critical interpretation, archaeology), but students may choose to create their own program of study. Concentrators will receive essential training in perceptual, historical, and critical analysis. Concentrators often study abroad for first-hand knowledge of works of art and monuments as well as for exposure to foreign languages and cultures. Because foreign language skills are essential for pursuing art historical studies in a professional environment or in graduate school, HIAA requires two years of foreign language study.

**History of Art and Architecture Requirements**

To complete the concentration, you will be expected to take a minimum of ten courses (11 for honors). Our goal in setting out these requirements is to welcome students into a lively and diverse department that also shares a cohesive and strong commitment to the field. We as a faculty want students to cultivate their special interests and also to venture into areas that may not be so familiar but that will open new and exciting possibilities for them. Ten courses are only the minimum requirement. Beyond that students are encouraged to take courses at RISD, participate in study abroad programs, and take courses in other Brown departments. As we are a truly interdisciplinary department, you will also find that our faculty collaborates with members of other departments to teach courses that bring together the strengths of different disciplines. We encourage both experimentation and concentration.

Our general survey in history of art and architecture (HIAA 0010) is an excellent foundation for the concentration. It is not a prerequisite for taking other lecture courses but you can count it as one of the 4 non-core courses required for the concentration (see below for core and non-core courses).

Since the history of art and architecture addresses issues of practice within specific historical contexts, concentrators are encouraged to take at least 1 studio art course. Courses in history also train students in methods and approaches that are highly relevant to the history of art and architecture. Study abroad can be a valuable enrichment of the academic work available on campus, in that it offers opportunities for first-hand knowledge of works of art and monuments as well as providing exposure to foreign languages and cultures. Study abroad should be planned in consultation with the concentration advisor in order to make sure that foreign course work will relate meaningfully to the concentrators program of study.

Four core general lecture courses, numbered HIAA 0020 - HIAA 0940. The courses should be distributed between three of the seven available areas of the discipline: Ancient; Medieval; Islamic; East Asian; Latin American; Early Modern (ca. 1400-1800); Modern, Contemporary.

- HIAA 0010 A Global History of Art and Architecture
- HIAA 0011 Introduction to the History of Architecture and Urbanism
- HIAA 0012 Theories of Architecture from Vitruvius to Venturi
- HIAA 0013 Introduction to Indian Art
- HIAA 0031 Pre-Islamic Empires of Iran
- HIAA 0040 Introduction to Medieval Art and Architecture
- HIAA 0041 The Architectures of Islam
- HIAA 0042 Islamic Art and Architecture
- HIAA 0061 Baroque
- HIAA 0062 The Age of Rubens and Rembrandt: Visual Culture of the Netherlands in the Seventeenth Century
- HIAA 0070 Introduction to American Art: The 19th Century
- HIAA 0074 Nineteenth-Century Architecture
- HIAA 0075 Introduction to the History of Art: Modern Photography
- HIAA 0081 Architecture of the House Through Space and Time
- HIAA 0089 Contemporary Photography
- HIAA 0321 Toward a Global Late Antiquity:200-800 CE
- HIAA 0340 Roman Art and Architecture: From Julius Caesar to Hadrian
- HIAA 0400 Early Christian, Jewish, and Byzantine Art and Architecture
- HIAA 0440 Gothic Art and Architecture
- HIAA 0460 Muslims, Jews and Christians in Medieval Iberia
- HIAA 0550 Gold, Wool and Stone: Painters and Bankers in Renaissance Tuscany
- HIAA 0560 Popes and Pilgrims in Renaissance Rome
- HIAA 0570 The Renaissance Embodied
- HIAA 0580 Word, Image and Power in Renaissance Italy
- HIAA 0600 From Van Eyck to Bruegel
- HIAA 0630 Cultural History of the Netherlands in a Golden Age and a Global Age
- HIAA 0710 The Other History of Modern Architecture
- HIAA 0770 Architecture and Urbanism of the African Diaspora
- HIAA 0771 African American and Caribbean Architectures: Domestic Space
- HIAA 0801 Art After ’68
- HIAA 0810 20th Century Sculpture

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
HIAA 0830 Revolutionary Forms: 100 Years of Art and Politics in Latin America
HIAA 0840 History of Rhode Island Architecture
HIAA 0850 Modern Architecture
HIAA 0860 Contemporary Architecture
HIAA 0861 City and Cinema
HIAA 0870 20th Century British Art: Edwardian to Contemporary
HIAA 0881 City and Cinema

Two core seminar courses, numbered between HIAA 1040 and 2
HIAA 1890

HIAA 1020 Topics in East Asian Art
HIAA 1090 Writing About the Arts
HIAA 1101 Introduction to Architectural Design Studio
HIAA 1101A Illustrating Knowledge
HIAA 1101B Seeing and Writing on Contemporary Arts
HIAA 1102 Architectural Drawing and Sketching
HIAA 1103 Introduction to Architectural Design
HIAA 1120B History of Urbanism, 1300-1700
HIAA 1120C History of Western European Urbanism 1200-1600
HIAA 1150C El Greco and Velazquez
HIAA 1150D El Greco and the Golden Age of Spanish Painting
HIAA 1170B Twentieth-Century American Painting
HIAA 1181 Prefabrication and Architecture
HIAA 1200A Ancient Art in the RISD Collection
HIAA 1200D Pompeii
HIAA 1201 Brushwork: Chinese Painting in Time
HIAA 1300 Topics in Classical Art and Architecture
HIAA 1301 The Palaces of Ancient Rome
HIAA 1302 Women and Families in the Ancient Mediterranean
HIAA 1303 Pompeii Art, Architecture, and Archaeology in the Lost City
HIAA 1310 Topics in Hellenistic Art
HIAA 1400F Research Seminar Gothic Art
HIAA 1410A Topics in Islamic Art: Islamic Art and Architecture on the Indian Subcontinent
HIAA 1430A The Visual Culture of Medieval Women
HIAA 1440D The Gothic Cathedral
HIAA 1410B Painting in Mughal India 1550-1650
HIAA 1440B The Medieval Monastery
HIAA 1460 Topics in Medieval Archaeology
HIAA 1550B Topics in the Early History of Printmaking: Festival and Carnival
HIAA 1560A Italy and the Mediterranean
HIAA 1560B Manerism
HIAA 1560C Renaissance Venice and the Veneto
HIAA 1560D Siena from Simone Martini to Beccafumi
HIAA 1560E The Arts of Renaissance Courts
HIAA 1560F Topics in Italian Visual Culture: The Visible City, 1400-1800
HIAA 1600A Bosch and Bruegel: Art Turns the World Upside Down
HIAA 1600B Caravaggio
HIAA 1600C Italian Baroque Painting and Sculpture
HIAA 1600D The Art of Peter Paul Rubens
HIAA 1600E The World Turned Upside Down
HIAA 1600F Antwerp: Art and Urban History
HIAA 1600G Art + Religion in Early Modern Europe
HIAA 1600H Comedy in Netherlandish Art From Hieronymus Bosch to Jan Steen
HIAA 1600I Collections and Visual Knowledge in Early Modern Europe: 1400-1800
HIAA 1600J Rembrandt
HIAA 1650A About Face: English Portraiture: 1600-1800
HIAA 1650B Visualizing Revolutionary Bodies 1785-1815
HIAA 1650C Visual Culture and the Production of Identity in the Atlantic World, 1700-1815
HIAA 1650D Souvenirs: Remembering the Pleasures and Perils of the Grand Tour
HIAA 1711 Black and White: Imagining Africans and African Americans in Visual Culture
HIAA 1770 Architecture and Visual Culture of Empire
HIAA 1850A Frank Lloyd Wright
HIAA 1850D Film Architecture
HIAA 1850E Architecture, Light and Urban Screens
HIAA 1850G Contemporary American Urbanism: City Design and Planning, 1945-2000
HIAA 1850H Berlin: Architecture, Politics and Memory
HIAA 1850E SoCal: Art in Los Angeles, 1945-Present
HIAA 1890G Contemporary Art of Africa and the Diaspora
HIAA 1910A Providence Architecture
HIAA 1910B Project Seminar: The Architecture of Bridges
HIAA 1910D Water and Architecture
HIAA 1910E Project Seminar for Architectural Studies Concentrators
HIAA 1920 Individual Study Project in the History of Architecture
HIAA 1930 The History and Methods of Art Historical Interpretation
HIAA 1990 Honors Thesis

Four elective courses. These can include courses taught in the
department, cross-listed courses from other departments, or
courses in other departments approved by the concentration
advisor. HIAA 0010 may count as one of these courses but
cannot count as one of the four core lecture courses. Students
are encouraged to take a studio class as part of this requirement.

Total Credits 10

1 The six core lecture and seminar courses must be taken in the
History of Art and Architecture department and cannot be replaced
with independent study, honors thesis or classes taken in other
departments, universities, or high schools.

2 A maximum of two (2) credits may be allowed for courses taken at
other universities (transfer credits or from study abroad) or courses
that also count toward a second concentration. No concentration
credit will be granted for AP/A-level scores, or for language classes.

Architectural Studies Track

The Optional Architectural Studies track within the History of Art and
Architecture concentration blends a variety of disciplines toward the
study of buildings and the built environment. The concentration prepares
students for the continued study of architecture and the history of
architecture in graduate school as well as careers in related areas such as
urban studies.

Because the architectural studies program was especially designed
for students wishing to gain greater experience in the practical skills
necessary for a career in architecture or a related field, concentrators are

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
required to take a course in design from the Visual Arts Department, the Rhode Island School of Design or an introduction to architectural design, theatre set design at Brown University.

Four lecture courses. These courses will be numbered between HIAA 0020 and HIAA 0940 and will be marked with an "A" in the course description. The courses must be distributed over three of seven areas in architectural history: Ancient; Medieval; Islamic; East Asian; Latin American; Early Modern (ca. 1400-1800); Modern/Contemporary.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIAA 0040</td>
<td>Introduction to Medieval Art and Architecture</td>
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<tr>
<td>HIAA 0042</td>
<td>Islamic Art and Architecture</td>
</tr>
<tr>
<td>HIAA 0031</td>
<td>Pre-Islamic Empires of Iran</td>
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<td>HIAA 0340</td>
<td>Roman Art and Architecture: From Julius Caesar to Hadrian</td>
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<td>HIAA 0400</td>
<td>Early Christian, Jewish, and Byzantine Art and Architecture</td>
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<td>HIAA 0440</td>
<td>Gothic Art and Architecture</td>
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<td>Architecture and Urbanism of the African Diaspora</td>
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<tr>
<td>HIAA 0771</td>
<td>African American and Caribbean Architectures: Domestic Space</td>
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<td>20th Century Sculpture</td>
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<tr>
<td>HIAA 0881</td>
<td>City and Cinema</td>
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</table>

One seminar or independent study in architectural history, numbered between HIAA 1100 and HIAA 1890, and marked with an "A" in the course description.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
The below pertains to ALL concentrators in the department:

**Language Requirement**

You will be expected to demonstrate reading proficiency in a language other than English. By learning the language of another culture you will gain a deeper understanding of its art, literature and history. Aside from this, knowledge of a foreign language will equip you with a skill essential for pursuing art historical studies in a professional environment or graduate school. The requirement can be fulfilled by either passing an 0500 level language course at Brown or by demonstrating an 0500 level reading ability in a placement test administered by Brown University. (Students who declared their concentration before August 2013 are expected to demonstrate proficiency at the 0400 level).

**Self Assessment**

All concentrators are required to write an essay when they file for the concentration that lays out what they expect to gain from the course of study they propose. All second semester seniors will be required to write a final essay that takes measure of what they have learned from the concentration, including their capstone and other experiences relating to their study of the history of art and architecture. For students doing a capstone, their capstone director will read this essay. A department subcommittee will read essays written by students not electing to do a capstone. The self-assessment should be turned in with a revised list of courses actually taken and the final paperwork for concentration approval.

**Capstone Project**

At the beginning of your senior year you will be actively encouraged to propose and undertake a Capstone Project. The Capstone Project is intended to challenge you with an opportunity to synthesize at a high level of achievement the knowledge and understanding you have gained by concentrating in the History of Art and Architecture or Architectural Studies. To propose and work on a Capstone Project you will need the support of a faculty sponsor. Capstone Projects embrace many possibilities. You can perfect a seminar paper in which you have developed a strong interest. You can participate in a graduate seminar to which the instructor has admitted you. You can serve as an undergraduate TA. You can work as an intern in museums and auction houses such as Christie’s. You might work on an archaeological excavation. You can participate in the Honors Program. Beyond these opportunities, the Department is open to other approaches. You should work with a faculty sponsor and with the Undergraduate Concentration Advisor to decide what will work best for you.

**Honors**

The Honors program in History of Art & Architecture and Architectural Studies will be administered as follows: accepted students will sign up for HIAA 1990 in the Fall and in the Spring. In the Fall, students will meet regularly with the whole Honors group and HIAA faculty to discuss methodology and general research and writing questions. In the Spring, students will continue to meet to present their research in progress to each other for comment and feedback. They will also be meeting regularly with their advisors and second readers throughout the year. Finished drafts of the thesis (which will generally be no more than 30-35 pages in length) will be due to the advisor and second reader on April 1 of the Spring semester. Comments will be returned to the students for final corrections at that point. There will be a public presentation of the Honors work at the end of the Spring semester.

Students wishing to write an honors thesis should have an 'A' average in the concentration. It is advisable for them to have taken at least one seminar in the department and written a research paper before choosing to undertake a thesis. While acceptance into the Honors program depends on the persuasiveness of the thesis topic as well as the number of students applying, students may refine their proposals by speaking in advance with potential advisors. No honors student may take more than four classes either semester of their senior year. Students who are expecting to graduate in the middle of the year are encouraged to discuss a different capstone project with individual advisors or the concentration advisor.

**Honors Application Process**

During the second semester of the junior year all concentrators will be invited to apply for admission to the Honors Program in History of Art and Architecture and Architectural Studies.

**Admission to the Honors Program**

1. To be admitted to the Honors Program you should have produced consistently excellent work and maintained a high level of achievement in all your concentration courses. You should have earned an A grade in most of your concentration courses.

2. The key project for honors is to write an honors thesis. When you apply for admission you will be asked to submit a proposal of no more than two double-spaced pages that states the topic (subject and argument) of the research to be undertaken as clearly as possible, and add a one-page bibliography of the most relevant books and major articles to be consulted for the project. This three page application should be submitted, along with a resume and a printout of the student's most recent available transcript and submitted to the Department with a short cover letter stating who you feel the most appropriate advisor and second readers are for the thesis and why, and what your preparation is for this project. Clarity and brevity are considered persuasive virtues in this process. Applicants will be notified about the success of their applications at the end of the semester.

3. For admission to the Honor Program you must include with your proposal a letter of support from a faculty member of the History of Art and Architecture Department who has agreed to serve as your thesis advisor. You should discuss the thesis topic with your advisor before you submit your proposal. During the process of researching and writing you will meet regularly with your advisor to discuss your work.

**Writing the Honors Thesis**

1. If you are accepted into the Honors Program you will register for HIAA 1990 during the two semesters when you are working on a thesis. This is a seminar led by the Department Undergraduate Concentration Advisor in which all honors students meet once a month to present the current progress of their work. It is a valuable opportunity to share ideas and receive feedback from your fellow honors students and faculty alike. The honors seminar also offers a
practical framework around which you can organize the progress of your work.
2. You will meet regularly with your thesis advisor and with a second reader to develop your ideas and writing.
3. Finished drafts of the thesis, which will generally be no more than 30-35 pages in length (exceptions to be determined in consultation with the instructor), not counting bibliography and visual materials, will be due to the advisor and second reader by April 1 of the Spring semester or by November 1 of the Fall semester if you plan on graduating in December. Comments will be returned to the students for final corrections at that point. There will be a public presentation of the Honors work at the end of the Spring semester.

**Independent Concentration**

Although Brown offers nearly 80 concentrations, a small number of students have academic interests that fall beyond the scope of these offerings. Brown allows these students to design their own concentrations through the Independent Concentration (IC) program. The IC program is for exceptionally dedicated students who are willing to spend extra time and effort creating a “new” concentration, representing a coherent field of study that Brown does not offer. Such fields may include emerging topics, such as “sustainable technology,” or broader interdisciplinary areas, such as “Deaf and Disability Studies.” Students interested in pursuing an Independent Concentration are strongly encouraged to review the IC website (http://brown.edu/academics/college/advising/curricular-resource-center/independent-concentrations/independent-concentrations), speak with the Curricular Resource Center (http://brown.edu/Administration/Dean_of_the_College/crc’s IC Coordinator and with the IC Dean (Dean Chang (margaret_chang@brown.edu)) and to review previous proposals in the CRC’s library.

Independent concentration proposals are reviewed and approved by the College Curriculum Council.

**International Relations**

The objective of the International Relations concentration is to foster creative thinking about pressing global problems and to equip students with the analytic tools, language expertise, and cross-cultural understanding to guide them in that process. To this end, the concentration draws on numerous departments including political science, history, economics, anthropology, sociology, psychology, religious studies, and area studies. The IR concentration is organized around a multidisciplinary core and two sub-themes: security and society, and political economy and society. It has a three-year language requirement that must be linked to the student’s selected region of the world. All concentrators are required to undertake a capstone project using research in a second language. Prospective concentrators should visit the IR site (http://watson.brown.edu/ir/advising) for next steps.

**Requirements**

The IR concentration requires 14 courses and the equivalent of 3 years of study in a second language. Regardless of track, all IR concentrators must take all five core courses, research methods, regional focus, and capstone courses.

**Security and Society track**

**Core Courses**

Students must take all 5 core courses, preferably during freshman or sophomore year. AP credit does not count toward the concentration.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Year Requirement</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0110</td>
<td>Anthropology and Global Social Problems: Environment, Development, and Governance</td>
<td>Freshman</td>
<td>Governance</td>
</tr>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
<td>Sophomore</td>
<td>Economics</td>
</tr>
<tr>
<td>HIST 0244</td>
<td>Understanding the Middle East: 1800s to the Present</td>
<td>Sophomore</td>
<td>History</td>
</tr>
<tr>
<td>HIST 1121</td>
<td>The Modern Chinese Nation: An Idea and Its Limits</td>
<td>Junior</td>
<td>History</td>
</tr>
</tbody>
</table>

**Track Requirements (five courses distributed between the sub-themes):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 0400</td>
<td>Introduction to International Politics</td>
<td>Global Markets</td>
</tr>
<tr>
<td>FREN 1900H</td>
<td>La France en guerre</td>
<td>Security and Society</td>
</tr>
<tr>
<td>HMAN 1971T</td>
<td>Law, Nationalism, and Colonialism</td>
<td>Security and Society</td>
</tr>
<tr>
<td>INTL 1443</td>
<td>History of American Intervention</td>
<td>Security and Society</td>
</tr>
<tr>
<td>INTL 1700</td>
<td>International Law</td>
<td>Security and Society</td>
</tr>
<tr>
<td>INTL 1802Q</td>
<td>Iran and the Islamic Revolution</td>
<td>Security and Society</td>
</tr>
<tr>
<td>INTL 1802V</td>
<td>Diplomacy, Economics &amp; Influence</td>
<td>Security and Society</td>
</tr>
<tr>
<td>INTL 1804B</td>
<td>Computers, Freedom and Privacy: Current Topics in Law and Policy</td>
<td>Security and Society</td>
</tr>
<tr>
<td>POLS 1020</td>
<td>Politics of the Illicit Global Economy</td>
<td>Security and Society</td>
</tr>
<tr>
<td>POLS 1220</td>
<td>Russia and Post-Soviet States</td>
<td>Security and Society</td>
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<tr>
<td>POLS 1380</td>
<td>Ethnic Politics and Conflict</td>
<td>Security and Society</td>
</tr>
<tr>
<td>POLS 1500</td>
<td>The International Law and Politics of Human Rights</td>
<td>Security and Society</td>
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<tr>
<td>POLS 1820H</td>
<td>Contraband Capitalism: States and Illegal Global Markets</td>
<td>Security and Society</td>
</tr>
<tr>
<td>POLS 1821M</td>
<td>War in Film and Literature</td>
<td>Security and Society</td>
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<tr>
<td>POLS 1822I</td>
<td>Geopolitics of Oil and Energy</td>
<td>Security and Society</td>
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<td>POLS 1822U</td>
<td>War and Human Rights</td>
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<td>Technology and International Politics</td>
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<tr>
<td>POLS 1823E</td>
<td>Global Justice</td>
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<tr>
<td>POLS 1823Q</td>
<td>Democratic Theory and Globalization</td>
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<tr>
<td>POLS 1824B</td>
<td>Post Conflict Politics</td>
<td>Security and Society</td>
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**Society (two or three courses):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sub-theme</th>
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</thead>
<tbody>
<tr>
<td>AMST 1904V</td>
<td>Decolonizing Minds: A People’s History of the World</td>
<td>Society</td>
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<tr>
<td>ANTH 1224</td>
<td>Human Trafficking, Transnationalism, and the Law</td>
<td>Society</td>
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<tr>
<td>ANTH 1251</td>
<td>Violence and the Media</td>
<td>Society</td>
</tr>
<tr>
<td>ANTH 1910G</td>
<td>Senior Seminar: Politics and Symbols</td>
<td>Society</td>
</tr>
<tr>
<td>FREN 1900H</td>
<td>La France en guerre</td>
<td>Society</td>
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<tr>
<td>HIST 0150D</td>
<td>Refugees: A Twentieth-Century History</td>
<td>Society</td>
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<tr>
<td>HIST 1969B</td>
<td>Israel-Palestine: Lands and Peoples II</td>
<td>Society</td>
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<td>HIST 1974J</td>
<td>Decolonizing Minds: A People’s History of the World</td>
<td>Society</td>
</tr>
<tr>
<td>HMAN 1970K</td>
<td>Law and Religion</td>
<td>Society</td>
</tr>
<tr>
<td>INTL 1802W</td>
<td>International Journalism: Foreign Reporting in Practice</td>
<td>Society</td>
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<tr>
<td>INTL 1803K</td>
<td>Media Wars: The Middle East</td>
<td>Society</td>
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<td>INTL 1803L</td>
<td>Humanitarianism in Uniform</td>
<td>Society</td>
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<td>INTL 1803M</td>
<td>Reassessing Contentious Politics, and Social Movements</td>
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<td>POLS 1380</td>
<td>Ethnic Politics and Conflict</td>
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<tr>
<td>POLS 1821L</td>
<td>International Relations of Russia, Europe and Asia</td>
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</table>

**Research Methods**

Prior to 7th semester. Quantitative or qualitative course from the following approved list.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 1151</td>
<td>Ethnographies of the Muslim Middle East</td>
<td>Research Methods</td>
</tr>
<tr>
<td>ANTH 1940</td>
<td>Ethnographic Research Methods</td>
<td>Research Methods</td>
</tr>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
<td>Research Methods</td>
</tr>
<tr>
<td>APMA 1650</td>
<td>Statistical Inference I</td>
<td>Research Methods</td>
</tr>
<tr>
<td>CLPS 0900</td>
<td>Statistical Methods</td>
<td>Research Methods</td>
</tr>
<tr>
<td>ECON 1620</td>
<td>Introduction to Econometrics</td>
<td>Research Methods</td>
</tr>
<tr>
<td>EDUC 1100</td>
<td>Introduction to Qualitative Research Methods</td>
<td>Research Methods</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Track Requirements (five courses from distributed between the sub-themes):

- **Economics (two or three courses):** All students MUST take Micro and Macro.
  - ECON 1110 Intermediate Microeconomics
  - ECON 1210 Intermediate Macroeconomics

- Plus an International Economics course:
  - ECON 1500 Current Global Macroeconomic Challenges
  - ECON 1510 Economic Development
  - ECON 1540 International Trade
  - ECON 1550 International Finance
  - ECON 1590 The Economy of China since 1949
  - ECON 1760 Financial Institutions
  - ECON 1765 Finance, Regulation, and the Economy: Research

- **Political Economy and Society Track**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 1320</td>
<td>Anthropology and International Development: Ethnographic Perspectives on Poverty and Progress</td>
</tr>
<tr>
<td>ENV 1350</td>
<td>Environmental Economics and Policy</td>
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<tr>
<td>INTL 1802V</td>
<td>Diplomacy, Economics &amp; Influence</td>
</tr>
<tr>
<td>INTL 1803G</td>
<td>Global Women’s Issues: Investing in women as strategy for sustainable growth and global development</td>
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<tr>
<td>POLS 1020</td>
<td>Politics of the Illicit Global Economy</td>
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<tr>
<td>POLS 1150</td>
<td>Prospects: The Ethics and Economics of Wealth Creation</td>
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<tr>
<td>POLS 1420</td>
<td>Money and Power in the International Political Economy</td>
</tr>
<tr>
<td>POLS 1490</td>
<td>Building a Better World: Film and Social Change</td>
</tr>
<tr>
<td>POLS 1730</td>
<td>Politics of Globalization</td>
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<tr>
<td>POLS 1820H</td>
<td>Contraband Capitalism: States and Illegal Global Markets</td>
</tr>
<tr>
<td>POLS 1822I</td>
<td>Geopolitics of Oil and Energy</td>
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<tr>
<td>POLS 1822M</td>
<td>Capitalism: For and Against</td>
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<tr>
<td>POLS 1824J</td>
<td>Culture, Identity and Development</td>
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<tr>
<td>SOC 0150</td>
<td>Economic Development and Social Change</td>
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- **Political Economy and Society Track**

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<td>EDUC 1100</td>
<td>Introduction to Qualitative Research Methods</td>
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<td>EDUC 1110</td>
<td>Introductory Statistics for Education Research and Policy Analysis</td>
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<td>POLS 1600</td>
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<td>SOC 1020</td>
<td>Methods of Social Research</td>
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<tr>
<td>SOC 1100</td>
<td>Introductory Statistics for Social Research</td>
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- **Regional Focus**

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<th>Course Title</th>
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<tr>
<td>EDUC 1110</td>
<td>Introductory Statistics for Education Research and Policy Analysis</td>
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<tr>
<td>POLS 1600</td>
<td>Political Research Methods</td>
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<tr>
<td>SOC 1020</td>
<td>Methods of Social Research</td>
</tr>
<tr>
<td>SOC 1100</td>
<td>Introductory Statistics for Social Research</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
The concentration requires that students demonstrate proficiency in the Italian language by completing up to ITAL 0600 (or the equivalent in Bologna). ITAL 0600 is the first language course that counts toward the eight required courses for the concentration. At least four of the eight courses should be taken in Italian.

### Italian Studies

Inherently interdisciplinary, the Italian Studies concentration allows students to strengthen their language skills in Italian and deepen their knowledge of Italian literature, history, art, and culture. Most concentrators have some background in Italian language. However, it is possible to concentrate in Italian studies without having studied the language before coming to Brown, although doing so requires an early start. After fulfilling the language requirement by completing up to ITAL 0600 (or the equivalent), students enroll in a variety of advanced courses, reflecting the interdisciplinary nature of the concentration. Junior concentrators often study abroad in the Brown Program in Bologna. All senior concentrators participate in the "senior conference" by delivering brief presentations on academic topics of their choice in Italian Studies. Concentrators might also pursue capstone research, writing, or multimedia projects.

The program has a director, an associate director/concentration advisor, and two faculty advisors for each track to assist students in planning their academic programs.

### Undergraduate Concentrations

<table>
<thead>
<tr>
<th>Language</th>
<th>Total Credits</th>
<th>14</th>
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<tbody>
<tr>
<td>AMST 1904V</td>
<td>Decolonizing Minds: A People's History of the World</td>
<td></td>
</tr>
<tr>
<td>ANTH 1910G</td>
<td>Senior Seminar: Politics and Symbols</td>
<td></td>
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<tr>
<td>FREN 1900H</td>
<td>La France en guerre</td>
<td></td>
</tr>
<tr>
<td>HIST 1969B</td>
<td>Israel-Palestine: Lands and Peoples II</td>
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<tr>
<td>HIST 1974J</td>
<td>Decolonizing Minds: A People's History of the World</td>
<td></td>
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<tr>
<td>HMAN 1970K</td>
<td>Law and Religion</td>
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<tr>
<td>INTL 1802Q</td>
<td>Iran and the Islamic Revolution</td>
<td></td>
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<tr>
<td>INTL 1802V</td>
<td>Diplomacy, Economics &amp; Influence</td>
<td></td>
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<tr>
<td>INTL 1802W</td>
<td>International Journalism: Foreign Reporting in Practice</td>
<td></td>
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<tr>
<td>INTL 1802Y</td>
<td>India in the World</td>
<td></td>
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<tr>
<td>INTL 1803G</td>
<td>Global Women’s Issues: Investing in women as strategy for sustainable growth and global development</td>
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<td>INTL 1803K</td>
<td>Media Wars: The Middle East</td>
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<td>INTL 1803L</td>
<td>Humanitarianism in Uniform</td>
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<td>INTL 1803M</td>
<td>Reassessing Contentious Politics, and Social Movements</td>
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<tr>
<td>INTL 1803N</td>
<td>The Politics of Food Security</td>
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<td>INTL 1910</td>
<td>Senior Honors Seminar</td>
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<td>POLS 1820H</td>
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<td>POLS 1821L</td>
<td>International Relations of Russia, Europe and Asia</td>
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<td>POLS 1822I</td>
<td>Geopolitics of Oil and Energy</td>
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<td>POLS 1822U</td>
<td>War and Human Rights</td>
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<td>POLS 1822X</td>
<td>Technology and International Politics</td>
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<td>Global Justice</td>
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<td>POLS 1823Q</td>
<td>Democratic Theory and Globalization</td>
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<td>POLS 1824B</td>
<td>Post Conflict Politics</td>
<td></td>
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<tr>
<td>POLS 1824J</td>
<td>Culture, Identity and Development</td>
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### ITALIAN STUDIES COURSES

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITAL 0550</td>
<td>Gold, Wool and Stone: Painters and Bankers in Renaissance Tuscany (HIAA 0550)</td>
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<tr>
<td>ITAL 0560</td>
<td>Constructing the Eternal City: Popes and Pilgrims in Renaissance Rome (HIAA 0560)</td>
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<tr>
<td>ITAL 0600</td>
<td>Advanced Italian II</td>
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<tr>
<td>ITAL 0750</td>
<td>Truth on Trial: Justice in Italy</td>
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<tr>
<td>ITAL 0751</td>
<td>When Leaders Lie: Machiavell in International Context</td>
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<tr>
<td>ITAL 0950</td>
<td>Introduction to Italian Cinema: Italian Film and History</td>
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<tr>
<td>ITAL 0951</td>
<td>The Grand Tour, or a Room with a View: Italy and the Imagination of Others</td>
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<tr>
<td>ITAL 0981</td>
<td>When Leaders Lie: Machiavell in International Context</td>
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<tr>
<td>ITAL 0985</td>
<td>Visions of War: Representing Italian Modern Conflicts</td>
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<tr>
<td>ITAL 1000A</td>
<td>Luigi Pirandello: Masks and Society</td>
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<tr>
<td>ITAL 1000B</td>
<td>Reading Recent Italian Fiction</td>
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<tr>
<td>ITAL 1000C</td>
<td>Nord - Sud e Identità Italiana</td>
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<tr>
<td>ITAL 1000D</td>
<td>Italian National Identity: Criticisms and Crises</td>
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<tr>
<td>ITAL 1000E</td>
<td>Masterpieces of Italian Cinema - Capolavori del cinema italiano</td>
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<tr>
<td>ITAL 1000F</td>
<td>20th Century Italian Poetry</td>
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<td>ITAL 1000G</td>
<td>Italian Identity</td>
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<tr>
<td>ITAL 1010</td>
<td>Dante in English Translation: Dante's World and the Invention of Modernity</td>
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<td>ITAL 1020</td>
<td>Boccaccio's Decameron</td>
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<td>ITAL 1029</td>
<td>World Cinema in a Global Context</td>
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<td>ITAL 1030A</td>
<td>Fellini</td>
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<td>ITAL 1310</td>
<td>Literature of the Middle Ages</td>
</tr>
<tr>
<td>ITAL 1320</td>
<td>Great Authors and Works of Italian Renaissance</td>
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<tr>
<td>ITAL 1340</td>
<td>The Panorama and 19th-Century Visual Culture</td>
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<tr>
<td>ITAL 1350A</td>
<td>Italian Mysteries and the New Italian Epic</td>
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<td>ITAL 1350B</td>
<td>Non Fiction</td>
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<td>ITAL 1360</td>
<td>Renaissance Italy</td>
</tr>
<tr>
<td>ITAL 1380</td>
<td>Italy: From Renaissance to Enlightenment</td>
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<tr>
<td>ITAL 1390</td>
<td>Modern Italy</td>
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<tr>
<td>ITAL 1400A</td>
<td>&quot;Italian (Mediterranean) Orientalisms&quot; Major Italian Writers and Filmmakers</td>
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<tr>
<td>ITAL 1400B</td>
<td>Fascism and Antifascism: Culture and Literature between the Two World Wars</td>
</tr>
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<td>ITAL 1400C</td>
<td>Literature and Adolescence</td>
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<td>ITAL 1400D</td>
<td>Photography and Literature: Italian Examples of an Uncanny Relationship</td>
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<td>ITAL 1400F</td>
<td>Twentieth Century Italian Culture</td>
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<td>ITAL 1400H</td>
<td>Early Modern Italy</td>
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<td>ITAL 1400I</td>
<td>Rituals, Myths and Symbols</td>
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<td>ITAL 1400J</td>
<td>The Many Faces of Casanova</td>
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<td>ITAL 1400K</td>
<td>Italy as Other</td>
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<tr>
<td>ITAL 1400L</td>
<td>History of Masculinity and Femininity from the Unification to 1968</td>
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<tr>
<td>ITAL 1400M</td>
<td>Giorgio Agamben and Radical Italian Theory</td>
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<tr>
<td>ITAL 1400P</td>
<td>The Southern Question and the Colonial Mediterranean</td>
</tr>
<tr>
<td>ITAL 1400Q</td>
<td>From Neorealism to Reality TV</td>
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</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
ITAL 1420 Sex and the Cities: Venice, Florence, and Rome, 1450-1800
ITAL 1430 Popular Culture, 1400 - 1800
ITAL 1431 Truth on Trial: Justice in Italy, 1400-1800 (HIST 1430)
ITAL 1550 Italian Representations of the Holocaust
ITAL 1550B Topics in the Early History of Printmaking: Festival and Carnival (HIAA 1550B)
ITAL 1560A Italy and the Mediterranean (HIAA 1560A)
ITAL 1580 Word, Image and Power in Renaissance Italy
ITAL 1590 Word, Media, Power in Modern Italy
ITAL 1610 The Divina Commedia: Inferno and Purgatorio
ITAL 1620 The Divina Commedia: Dante's Paradiso: Justifying a Cosmos
ITAL 1920 Independent Study Project (Undergraduate)
ITAL 1990 Senior Conference

COURSES IN OTHER DEPARTMENTS
HIAA 0340 Roman Art and Architecture: From Julius Caesar to Hadrian
HIAA 0550 Gold, Wool and Stone: Painters and Bankers in Renaissance Tuscany
HIAA 0560 Popes and Pilgrims in Renaissance Rome
HIAA 1200D Pompeii
HIAA 1301 The Palaces of Ancient Rome
HIAA 1302 Women and Families in the Ancient Mediterranean
HIAA 1303 Pompeii: Art, Architecture, and Archaeology in the Lost City
HIAA 1550B Topics in the Early History of Printmaking: Festival and Carnival
HIAA 1560A Italy and the Mediterranean
HIAA 1560C Renaissance Venice and the Veneto
HIAA 1560D Siena from Simone Martini to Beccafumi
HIAA 1560F Topics in Italian Visual Culture: The Visible City, 1400-1800
HIAA 1600C Italian Baroque Painting and Sculpture
ARCH 1155 Cities, Colonies and Global Networks in the Western Mediterranean
MUSC 0071 Opera

Italian Studies Concentration and the Brown Program in Bologna

Concentrators who enroll in the Brown in Bologna program should fulfill the requirements according to the following sequence: prior to departure, the student should complete the level of Italian language study required (ITAL 0300) and enroll in one of the courses in the four distribution areas -- Italian literature; Italian History; history of Italian art and architecture; film or performance. Upon return from Bologna, the student should enroll in at least one advanced course offered by the department, preferably a course taught in Italian. Any student returning from the Bologna program must enroll in a course above the language level of ITAL 0600. Credits toward the Italian Studies concentration may also be transferred from the Brown in Bologna Program. Concentrators may count three courses per semester toward the concentration (or six courses total for the year), although the course content must focus on Italy if the student wishes to count the course toward the concentration requirements. Concentrators should consult the concentration advisor to know which courses may or may not transfer as credits toward the concentration.

Honors in Italian Studies

Concentrators are encouraged to expand their understanding of Italian language, history, or culture through independent research that will result in a thesis, a translation, or a multimedia project, developed in consultation with the undergraduate concentration advisor and the individual faculty member who will advise the student’s project. The Honors thesis in Italian Studies is a two-semester thesis. Students who intend to complete an honors project should enroll for the first semester in ITAL 1920 (Independent Study), and have their project approved by their advisor by October 15. During the second semester, honors students enroll in ITAL 1990 and continue to work with their advisor to complete the project. ITAL 1990 does not count as one of the eight courses required for the concentration.

Capstone Experiences in Italian Studies

A Capstone experiences in Italian Studies would consist of a course or project that a student, in consultation with the undergraduate advisor, feels would integrate the various intellectual engagements of this interdisciplinary concentration, and constitute a culminating experience in Italian Studies at Brown. Such experiences are strongly encouraged, and should be arrived at through conversations with the concentration advisor or a professor in the department. This could include the Brown Program in Bologna, typically taken in the Junior year, and/or the honors thesis in the senior year. However, students may also apply early in the Fall or Spring semester of their senior year for permission to designate one of their courses (1000-level or above) a Capstone course. In consultation with the professor, students in Capstone courses complete an independent research, writing, or multimedia project that is well beyond the required assignment for the course. ITAL 1920 (Independent Study) may also be designated a Capstone course with the permission of the instructor.

Judaic Studies

Jews have lived and flourished over thousands of years in a variety of social contexts, stretching from the Land of Israel and the eastern Mediterranean to Asia, Africa, Europe, and the Americas. Concentrators will have the opportunity to study Jews in these contexts, getting to know their social structures, and what they have created. The subjects of study cover an astonishing range, including history and society, Jewish law and philosophy, and Jewish literature and ritual. Students will learn to unlock this wealth in both the ancient and the modern worlds through a number of academic disciplines - History, Religious Studies, and Literature. These also provide tools for studying and analyzing human societies and cultures in general, for which Jewish experiences provide an important perspective.

PROGRAM IN JUDAIC STUDIES

Required Coursework

The Program in Judaic Studies offers two paths (detailed below). Please note that the following apply to each concentrator:
1) All students are required to take a total of ten courses.
2) All students must take one full year of Hebrew (two of the ten required courses). Generally, this requirement will consist of two courses in Elementary Hebrew (HEBR 0100/HEBR 0200) or the equivalent as determined by a proficiency examination. Fulfillment of the Hebrew requirement through examination does not reduce the requirement to take ten courses for the concentration.
3) Upon declaring a concentration in Judaic Studies, each student must define his or her primary disciplinary track (History, Religious Studies, or Language/Literature). Concentrators will then be assigned a faculty mentor in that discipline (within the Judaic Studies faculty) to help students select courses and construct a coherent concentration plan.

Program in History or Religious Studies:

For this track, students are expected to complete a minimum of four courses in their area of disciplinary focus (History or Religious Studies), at least one of which must and no more than two of which may be outside the Program in Judaic Studies in the department of disciplinary focus (preferably methods courses, such as in the History department or RELS 1000). Students in this track, in consultation with the concentration.
Program in Language/Literature:
For this track, students are expected to complete five courses in Hebrew language (HEBR 0100 / HEBR 0200; HEBR 0300/HEBR 0400; HEBR 0500). In addition, students will take Issues in Israel in Hebrew (HEBR 0600) and one further course in Judaic Studies (within the disciplinary focus). Two additional courses in the disciplinary focus, at least one of which must be outside the Program in Judaic Studies in a department of shared disciplinary focus (e.g. English or Comparative Literature), are also required. Fulfillment of the Hebrew requirement through proficiency examination does not reduce the requirement to take ten courses for the concentration.

4) Of the courses required in the Program in Judaic Studies, at least one should focus on the ancient period and one should focus on the modern period.

5) Each student, in discussion with his/her mentor, is required to designate an advanced course (1000 level) in his/her senior year either within the Judaic Studies program or in the corresponding disciplinary department as the capstone for his/her concentration. Within the frame of this capstone course, the concentrator will write a final paper on a topic in Judaic Studies that displays in an appropriate way the theoretical and interpretive issues of the concentration focus. If a student opts to fulfill this requirement in a course outside the Program in Judaic Studies, the student must get permission in advance both from his/her mentor and from the professor of the course in question since the student’s final project will address a Judaic Studies topic or theme.

6) Students who study at other institutions, either in the United States or abroad, may apply a maximum of four courses (two topical and two language courses) to the concentration.

7) Double concentrators may count up to two courses that they have used to complete their concentration requirements in another department towards their concentration in Judaic Studies.

Honors Program
Any student who wishes to engage more deeply in research related to Judaic Studies in any of its disciplines or branches is invited to consider writing an Honors Thesis.

The Honors Thesis
The goal of the thesis is to add to the existing scholarship in the field of Judaic Studies. It should be based on original research, involving the close reading of primary sources. The honors thesis is expected to present an argument based on the student's own analysis and will engage an ongoing debate or discussion in the field, demonstrating an awareness of the major research done until now and clearly identifying its own contribution, however limited. Since it is the equivalent of two semester-long courses, it should be a substantial piece of work (typically between 35,000-55,000 words) containing a sustained and consistently supported argument. To be successful, the student needs to adopt both a critical research methodology and a logical research strategy, both of which should be discussed in the thesis itself. In addition to being assessed in all these aspects, the thesis will also be graded on its organization (the way in which it is structured into separate and clearly defined chapters to support the main argument) as well as the quality and precision of its writing. Work that simply describes and summarizes its sources along with previous research is not acceptable. The goal here is original research and analysis.

Entering the Program
In order to be considered a candidate for Honors, students will be expected to have maintained an outstanding record (at least A in Judaic Studies courses. The Honors thesis, which fulfills the capstone requirement, will normally be written as a two-semester individual study project (numbered JUDS 1975/JUDS 1976) during the senior year. A student contemplating a thesis should approach the faculty member with whom he or she hopes to work during the sixth semester. Once he or she has agreed to be the advisor (or helped find another member of the program better suited to the project), the student begins a process of consultation in order to determine a topic for the thesis, its sources, and proposed methodology. The contours of the project should also be laid out so that the student can commence productive research at the very beginning of the seventh semester. After this, a second reader for the thesis should be chosen by the advisor in consultation with the student. This may be a faculty member of the Judaic Studies program, one of the affiliate faculty, or, should the topic require it, a member of a different department. By the last week of the semester, the student should submit a thesis information form detailing the thesis topic with a short description of the proposed project, countersigned by advisor and second reader.

Thesis Proposal
During the first three weeks of the seventh semester, the student should work with the faculty advisor to write a thesis proposal. This should be a brief document (1,500-2,000 words) explaining the topic chosen for the thesis and its significance to the field of Judaic Studies, with reference to previous research on the subject. The proposal should detail the questions to be asked and the kind of argument that will be made as well as explaining the primary sources and research methodology that will be employed. The proposed research strategy (i.e. the stages by which research and writing will be done) and timetable should be appended together with a brief, one page bibliography of primary sources and major research to be consulted.

Once the advisor is satisfied with the proposal, the student will be considered fully accepted into the Honors program and can enroll in the required independent study course by the last day to add a course in the fourth week of the term.

Research and Writing
It is the responsibility of the student to carry out the research program outlined in the proposal, as well as to write the thesis in an organized and timely fashion. During the process of research and writing, the advisor will continue to work closely with the student, providing guidance on research methods and suggesting further secondary reading. A regular meeting schedule will be set up to help the student meet the short- and long-term deadlines he or she has set. The advisor will also evaluate the progress of the research, providing any necessary direction and detailed feedback on written drafts.

The second reader will also be available to provide a measure of input and guidance during the process of research and writing. This may be particularly important in those areas where the primary advisor has limited expertise. The second reader may also be willing to help with giving feedback on various sections of the thesis drafts. All these roles should be determine by a process of consultation involving the advisor, the student, and the second reader him/herself.

The final thesis should have a complete scientific apparatus - citations and a full bibliography - in a form determined by the advisor. It should be submitted no later than April 15 for May graduates and November 15 for December completers.

Assessment
The thesis will be assessed independently by the advisor and the second reader in written reports. In order to receive Honors, it should be deemed excellent according to the following standards:

- Is the scope of the work appropriate for an Honors thesis?
- To what extent does it qualify as original research?
- To what degree does it sustain an analytic argument throughout?
- To what degree is it rooted in an engagement with previous research?
- How well does it reflect critically on its method and process?
- To what extent is the organization adequate to the argument presented?
- How well is the thesis rooted in the common conventions of the field?
- To what degree is the writing clear, cogent, and free of errors of grammar, tone, and style?

The two reports will be circulated to all faculty members in the program, who will review them before making the final determination at the next faculty meeting whether the thesis merits Honors. The meeting must
The concentration in Latin American and Caribbean Studies (LACA) leads to a strong, interdisciplinary understanding of culture, history, and contemporary issues in Latin America, the Caribbean, and the Latino/a diaspora.

Requirements are intentionally broad and flexible to accommodate the focused interests of students in understanding the diverse reality of this region. Concentration requirements include four themes: language, area studies, research, and internship / service work. A wide selection of courses from departments across the University expose students to the methods and materials of different disciplines and provide a background in the contemporary and historical contours of Latin American, Caribbean, and Latino/a societies. For more information, contact the Director of Undergraduate Studies, Jeremy Mumford (jeremy_mumford@brown.edu?subject=LACA concentration).

Requirements are intentionally broad and flexible to accommodate the interests of students in understanding the diverse reality of Latin America and the Caribbean, yet the concentration also encourages focus. Concentration requirements cover four general areas: language and literature, area studies, independent research, and out of classroom experience.

Language

Basic competence in either Spanish or Portuguese is required. Each student must take either HISP 0100, HISP 0200, POBS 0110 or any more advanced Spanish or Portuguese language course. This requirement may be satisfied by examination, but the examination will not count as a course. No more than one advanced language course (not including literature courses) may be counted among the ten courses required for the concentration.

Literature

Some familiarity with the literature of the region is required. Each concentrator must take at least one of the following: HISP 0730, POBS 0610, or a 1000-level Spanish or Portuguese literature course dealing with Latin America.

Area Studies

6 courses: Two types of area-focused courses are required: (1) courses specifically designated "Latin American Studies" (LAST, not including LACA 1990- LACA 1991), and (2) courses in several departmental programs that demonstrate the ways in which various disciplines have contributed to our understanding of Latin America. Approved area studies courses for the concentration are listed in Appendix B of the Concentration Guide.

At least 2 disciplines (not including Latin American Studies) must be represented among the six area studies courses. Other 1000-level courses dealing with related subjects that are especially pertinent to the study of Latin America may be substituted with approval.

Senior Thesis or Project

2 courses: A Senior Thesis or Project is optional for concentrators. It includes course credit for a reading and research course (LACA 1990-LACA 1991). In order to integrate the diverse perspectives gained in courses and readings, seniors may elect to complete a Senior Thesis or Project under the direction of one faculty member. Seniors will also choose one additional faculty member to serve as a reader. The reader will receive a draft and a finished copy of the student's thesis or project, which the reader will be responsible to grade. The reader may be involved in the earlier development of the thesis or project depending upon the arrangement made by the student with the reader. The Senior Thesis or Project will normally consist of a major research paper. A student may, with prior permission of the Latin American and Caribbean Studies Concentration Advisor, present a film, videotape, museum exhibition, or other appropriate project, together with a paper that clearly demonstrates the academic relevance of the project. Only the Senior Thesis qualifies the student (along with a minimum B+ average) for Honors. The Senior Project is quite often of a more personal nature, such as observations on practice teaching or a survey of social resources on Latin America. Near the beginning of the seventh semester, students should submit to the concentration advisor a 5 to 8 page prospectus accompanied by the signature of one faculty member indicating that he or she is willing to serve as primary advisor on the project.

If a concentrator chooses to do neither a senior thesis nor a senior project, then a research paper must be written in an advanced undergraduate seminar (1000-level). The seminar must be among the approved area studies courses listed in Appendix B of the Latin American Studies Concentration Guide, and will count as one of the ten courses required for the concentration. Research papers will typically be 20-30 pages in length and must be approved by the Concentration Advisor. Students who choose this option do not take LACA 1990- LACA 1991. The seminar counts as the research component of the program. The distribution requirements for this option are: 2 language courses, 7 area studies courses and 1 research course (i.e. the seminar for which the paper is written).

Internships/Community Service

The Concentration in Latin American and Caribbean Studies requires students to complete an internship or volunteer service work in Latin America or with a local organization that works primarily with Spanish or Portuguese speaking peoples. The Center maintains a database of local and international internship opportunities. Students are strongly encouraged to consult with the Swearer Center for Public Service. Internships and community service work are available to Brown students who study abroad at the Brown programs in Mexico (Universidad de las Americas) and in Brazil (Catholic University of Rio de Janeiro). Examples of local service work performed by concentrators in previous years include: helping compile a Spanish language guide to welfare service agencies, developing a culturally appropriate adaptation of a health testing and education program, and ESL instruction to Latin American immigrants. Such extracurricular work can be rewarding in itself; in consultation with a faculty member, it can often be used to earn academic credit and furnish material for either a Senior Thesis or Project.

A minimum of one semester or a summer of internship or volunteer service work is required. Students need to submit an internship/service work proposal form to the Latin American and Caribbean Studies Concentration Advisor for approval prior to starting the internship or service work. Upon completion of the internship or service work, students are required to submit to the Concentration Advisor a brief summary report of their experience, which must be signed by the supervisor of the student's internship or service work.

Honors

Qualified undergraduates may pursue work towards the B.A. with Honors. The requirements for graduation with Honors are the following:

1. Maintenance of at least a B+ average in the ten courses counting for the concentration.
2. Maintenance of at least a B+ average in all course work done for the B.A. at Brown.
3. Completion of a Senior Thesis approved by the primary advisor and reader as acceptable for Honors. The senior thesis should be "A" level work, although an "A" thesis does not automatically qualify for honors.

Prizes and Awards: Graduating seniors in Latin American Studies are eligible for an award administered by the concentration for outstanding Senior Thesis.
Foreign Study
Study abroad (normally in the junior year) is encouraged as an important part of the concentration. Interested students should begin early to prepare for such a venture. Popular programs with Latin American concentrations include Universidad de las Americas-Puebla, Mexico, and the Catholic University (PUC-Rio) of Rio de Janeiro, Brazil. Up to three courses taken abroad may be counted toward the ten courses required for the concentration. A list of Brown programs and approved non-Brown programs is available from the Office of International Programs (OIP) located in Rhode Island Hall. Feel free to consult the Latin American and Caribbean Studies concentration advisor about study abroad.

Linguistics

Language is a uniquely human capacity that enables us to communicate a limitless set of messages on any topic. While human languages can differ greatly in certain respects, all are intricate, complex, rule-governed systems. Linguistics is the scientific study of these systems, their use in communicative and other social settings, and their cognitive and neural underpinnings. The linguistics concentration at Brown gives students a background in the "core" aspects of the language system: phonetics/phonology (the study of speech sounds and their patterning), syntax (the study of combinatorics of words, phrases, and sentences), and semantics/pragmatics (the study of the meanings of words, sentences, and conversation). Beyond this, students may focus more heavily in one or more of these areas and/or explore related questions such as how children and adults learn language (language acquisition), how utterances are produced and understood in real time (psycholinguistics), or how speaking and understanding are anchored in underlying neural systems (neurolinguistics). Other areas such as historical linguistics, sociolinguistics, philosophy of language, and linguistic anthropology can also be pursued in conjunction with offerings in other departments.

Requirements (10 courses)

<table>
<thead>
<tr>
<th>Prerequisite Course</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 0030 Introduction to Linguistic Theory (may be waived in special instances)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 1310 Introduction to Phonological Theory</td>
<td></td>
</tr>
<tr>
<td>CLPS 1330 Introduction to Syntax</td>
<td></td>
</tr>
<tr>
<td>AND one of:</td>
<td></td>
</tr>
<tr>
<td>CLPS 1341 Lexical Semantics</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 1342 Formal Semantics</td>
<td></td>
</tr>
<tr>
<td>CLPS 1370 Introduction to Pragmatics</td>
<td></td>
</tr>
<tr>
<td>One course in Psycholinguistics to be drawn from the following:</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0800 Language and the Mind</td>
<td></td>
</tr>
<tr>
<td>CLPS 1650 Child Language Acquisition</td>
<td></td>
</tr>
<tr>
<td>CLPS 1800 Language Processing</td>
<td></td>
</tr>
<tr>
<td>CLPS 1820 Language and the Brain</td>
<td></td>
</tr>
<tr>
<td>CLPS 1821 Neuroimaging and Language</td>
<td></td>
</tr>
<tr>
<td>CLPS 1890 Laboratory in Psycholinguistics</td>
<td></td>
</tr>
<tr>
<td>or any Topics Course in Language Acquisition or Language Processing</td>
<td></td>
</tr>
</tbody>
</table>

5 additional appropriate electives forming a thematically related set to be determined in consultation with the Concentration Advisor. At least one of these must be drawn from the list of advanced courses listed below, and we strongly recommend that at least one course be an appropriate methods and a topics course. No more than 2 of these courses may be drawn from below 1000 level courses. The electives can be drawn from any of the above courses, or any of the other linguistic/language related courses in the CLPS department. Electives may also be drawn from courses in other in consultation with the Concentration Advisor; a list of courses which strictly count towards the Linguistics Concentration (provided they form part of the thematically related set) is appended below.

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 1320</td>
<td>The Production, Perception, and Analysis of Speech</td>
</tr>
<tr>
<td>CLPS 1332</td>
<td>Issues in Syntactic Theory</td>
</tr>
<tr>
<td>CLPS 1342</td>
<td>Formal Semantics</td>
</tr>
<tr>
<td>CLPS 1360</td>
<td>Introduction to Corpus Linguistics</td>
</tr>
<tr>
<td>A course from the 1381 series (Topics in Phonetic &amp; Phonology)</td>
<td></td>
</tr>
<tr>
<td>A course from the 1383 series (Topics in Language Acquisition)</td>
<td></td>
</tr>
<tr>
<td>CLPS 1390</td>
<td>Linguistic Field Methods</td>
</tr>
<tr>
<td>CLPS 1821</td>
<td>Neuroimaging and Language</td>
</tr>
<tr>
<td>CLPS 1880 series (Topics in Psycholinguistics)</td>
<td></td>
</tr>
<tr>
<td>CLPS 1890</td>
<td>Laboratory in Psycholinguistics</td>
</tr>
</tbody>
</table>

Other Courses Routinely Fulfiling Linguistics Concentration Requirements (in consultation with the Concentration Advisor):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 0800</td>
<td>Sound and Symbols: Introduction to Linguistic Anthropology</td>
</tr>
<tr>
<td>ANTH 1800</td>
<td>Sociolinguistics, Discourse and Dialogue</td>
</tr>
<tr>
<td>CLPS 0050M</td>
<td>Playing with Words: The Linguistic Principles Behind Word Games and Puzzles</td>
</tr>
<tr>
<td>CLPS 1365</td>
<td>Introduction to Historical Linguistics</td>
</tr>
<tr>
<td>CSCI 1460</td>
<td>Computational Linguistics</td>
</tr>
<tr>
<td>EAST 1510</td>
<td>Chinese: A History of the Language</td>
</tr>
<tr>
<td>EGYT 2310</td>
<td>History of the Ancient Egyptian Language</td>
</tr>
<tr>
<td>SLAV 1300</td>
<td>Sociolinguistics (with Case Studies on the Former USSR and Eastern Europe)</td>
</tr>
<tr>
<td>PHIL 0540</td>
<td>Logic</td>
</tr>
<tr>
<td>PHIL 1790</td>
<td>Philosophy of Language</td>
</tr>
</tbody>
</table>

Total Credits: 10

NOTE: This is NOT an exhaustive list of courses that can be applied towards the Linguistics Concentration requirements.

Honors (12 courses)
Candidates for Honors in Linguistics must meet all of the requirements above, write an Honors thesis, and take two additional courses. One course is normally CLPS 1980 (Directed Research in Cognitive, Linguistic, and Psychological Sciences) - intended for work on the Honors thesis. Three of the total 12 courses must be drawn from the advanced list above (the Directed Research course counts as one of the advanced courses). Normally a 3.5 grade-point average in the concentration is required for admission to the Honors program. Honors candidates should formalize their projects in consultation with their advisors by the end of September 6. Refer to the CLPS Honors Program page for detailed information about the Linguistics Honors program.

Independent Study

Independent study is encouraged for the A.B. degree. Students should sign up for CLPS 1980 with a faculty advisor who is a member of the Department of Cognitive and Linguistic Sciences (CLPS). Arrangements should be made in Semester 6 for students expecting to do independent study during Semesters 7 and/or 8.
Do Foreign Language Courses Count?

Foreign language courses will generally not count towards the concentration requirements, except those that focus on the structure or history of the language. Students are, however, advised to gain familiarity with a foreign language, and are encouraged to take at least one course which deals with the structure of a language other than English.

NOTE: Please refer to the Cognitive, Linguistic, and Psychological Sciences undergraduate Linguistics concentration page for updates not listed here.

Literary Arts

Brown’s Program in Literary Arts provides a home for innovative writers of fiction, poetry, playwrighting, screenwriting, literary translation, electronic writing and mixed media. The concentration allows students writers to develop their skills in one or more genres while deepening their understanding of the craft of writing. Many courses in this concentration require a writing sample; students should consult a concentration advisor or the concentration website for strategies on getting into the appropriate course(s).

Candidates for the Bachelor of Arts degree with concentration in Literary Arts will be expected to complete the following work:

1. At least four creative writing workshops from among the following series: LITR 0100, LITR 0110, LITR 0210, LITR 0310, LITR 0610, LITR 1010, LITR 1110, LITR 1510 and LITR 1410. At least two genres must be covered within the four courses taken. An independent study in literary arts (LITR 1310 and LITR 1510) may count toward the workshop requirement. Other writing-intensive courses may also count, at the discretion of the advisor.

2. Six elective reading and research in literary arts courses, which must include:
   • a course in literary theory or the history of literary criticism
   • a course that primarily covers readings and research in literary arts created before 1800
   • a course that primarily covers readings and research in literary arts created between 1800 and 1900
   • a course that primarily covers readings and research in literary arts created after 1900

These courses, selected in consultation with a concentration advisor, may come from (but are not limited to) the following departments: Africana Studies, American Civilization, Classics, Comparative Literature, East Asian Studies, Egyptology, French Studies, German Studies, Hispanic Studies, Italian Studies, Judaic Studies, Linguistics, Literatures and Cultures in English, Middle East Studies, Modern Culture and Media, Music, Portuguese and Brazilian Studies, Slavic Studies, South Asian Studies, Theatre, Speech and Dance, Visual Arts. With approval from the concentration advisor, courses covering pre-20th century time periods may be distributed in a variant manner, so long as they cover two distinct literary time periods that precede the 20th century.

3. Among the ten required courses, at least four must be at the 1000-level or above. At least six classes (workshops and reading/research courses) that shall count toward the concentration must be taken at Brown through the Literary Arts Department. No more than two of the ten required courses for the concentration may also count toward fulfilling a second concentration.

4. During the senior year, all students must take at least one course within the Literary Arts course offerings (courses with LITR designation by the Registrar, or courses approved by the concentration advisor).

Honors in Creative Writing: Course requirements are the same as those for the regular concentration (four workshops, six elective literature-reading courses), with the following changes and additions: honors candidates must include two 1000-level workshops or independent studies among their courses; and complete a thesis. Students who are enrolled in or have completed at least one 1000-level workshop (or independent study) may submit honors applications to the Literary Arts Department from the first day of the fall semester to 25 September. Interested students should obtain information from the office of the Literary Arts Department.

Marine Biology

Note: This concentration program is being phased out for Class of 2017 students and greater in favor of a track program within the Sc.B. in Biology.

Standard program for the Sc.B. degree

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure (or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0030</td>
<td>Basic Physics (or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0040</td>
<td>Basic Physics (or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I (or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II (or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td>Two additional courses in physics, chemistry, mathematics, applied mathematics, computer science, engineering, or geological sciences, as approved by advisor.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Select four of the following biology courses:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 0410</td>
<td>Invertebrate Zoology</td>
<td></td>
</tr>
<tr>
<td>BIOL 0420</td>
<td>Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 0510</td>
<td>Introductory Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 0800</td>
<td>Principles of Physiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1180</td>
<td>Comparative Animal Physiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1440</td>
<td>Marine Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1880</td>
<td>Comparative Biology of the Vertebrates</td>
<td></td>
</tr>
<tr>
<td>Select three additional biology courses, highly recommended are:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems</td>
<td></td>
</tr>
<tr>
<td>BIOL 0470</td>
<td>Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 0480</td>
<td>Evolutionary Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 0500</td>
<td>Cell and Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1180</td>
<td>Comparative Animal Physiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1310</td>
<td>Developmental Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1410</td>
<td>Evolutionary Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 1420</td>
<td>Experimental Design in Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1470</td>
<td>Conservation Biology</td>
<td></td>
</tr>
<tr>
<td>ENVS 0490</td>
<td>Environmental Science in a Changing World</td>
<td></td>
</tr>
<tr>
<td>Select two of the following group of related science courses:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CSCI 0040</td>
<td>Introduction to Scientific Computing and Problem Solving</td>
<td></td>
</tr>
<tr>
<td>GEOL 0070</td>
<td>Introduction to Oceanography</td>
<td></td>
</tr>
<tr>
<td>GEOL 0310</td>
<td>Fossil Record</td>
<td></td>
</tr>
<tr>
<td>GEOL 1110</td>
<td>Estuarine Oceanography</td>
<td></td>
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<tr>
<td>GEOL 1120</td>
<td>Paleoneuroanatomy</td>
<td></td>
</tr>
<tr>
<td>GEOL 1130</td>
<td>Ocean Biogeochemical Cycles</td>
<td></td>
</tr>
<tr>
<td>GEOL 1240</td>
<td>Stratigraphy and Sedimentation</td>
<td></td>
</tr>
<tr>
<td>GEOL 1330</td>
<td>Global Environmental Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>GEOL 1580</td>
<td>Quantitative Elements of Physical Hydrology</td>
<td></td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td></td>
</tr>
</tbody>
</table>

An approved course in statistics

BIOL 1950/1960 Directed Research/Independent Study (conducted at Brown or an approved marine lab or field station). 2

Total Credits 17

1 Or substitutions as approved by the concentration advisor.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
A summer or semester at a field station is recommended. Please note that some recommended courses are offered every other year; others have limited enrollment and require early sign-up.

**Mathematics**

Mathematics is a grouping of sciences, including geometry, algebra, and calculus, that study quantity, structure, space, and change. Mathematics concentrators at Brown can explore these concepts through the department’s broad course offerings and flexible concentration requirements. The concentration leads to either the Bachelor of Arts or Bachelor of Science degree (the latter is strongly recommended for students interested in pursuing graduate study in mathematics or related fields). Concentrators begin their learning with multivariable calculus, linear algebra, and abstract algebra. Beyond these prerequisites, students take a variety of advanced topics on the 1000 and 2000 level based on their interests. Students also have the option of completing a thesis project.

Concentrators in mathematics should complete the prerequisites by the end of their sophomore year. It is strongly recommended that students take MATH 1010 before taking MATH 1130.

**Standard program for the A.B. degree**

**Prerequisites:**
- Multivariable calculus and linear algebra (choose one of the following sequences):  
  - MATH 0180 & MATH 0520 and Linear Algebra  
  - MATH 0180 & MATH 0540 and Honors Linear Algebra  
  - MATH 0200 & MATH 0520 and Linear Algebra  
  - MATH 0350 & MATH 0540 and Honors Linear Algebra  
  - Or the equivalent

**Program:**
- MATH 1530 Abstract Algebra 1
- Five other 1000- or 2000-level Mathematics courses

**Total Credits:**

8

**Standard program for the Sc.B. degree**

**Prerequisites:**
- Multivariable calculus and linear algebra (choose one of the following sequences):  
  - MATH 0180 & MATH 0520 and Linear Algebra  
  - MATH 0180 & MATH 0540 and Honors Linear Algebra  
  - MATH 0200 & MATH 0520 and Linear Algebra  
  - MATH 0350 & MATH 0540 and Honors Linear Algebra  
  - Or the equivalent

**Program:**
- MATH 1130 Functions of Several Variables 2
- MATH 1140 Functions Of Several Variables 1
- MATH 1260 Complex Analysis 1
- MATH 1410 Combinatorial Topology 1
- MATH 1540 Topics in Abstract Algebra 1
- Four additional courses in mathematics, science, economics, or applied mathematics approved by the concentration advisor 4

**Honors**

Honors degrees may be recommended for students who have exhibited high achievement in mathematics. Candidates must complete at least eight mathematics courses at the 1000 or 2000 level with sufficiently good grades and must write an honors thesis under the guidance of a faculty member. The honors thesis is usually written while the candidate is enrolled in MATH 1970. The candidate should consult with the concentration advisor for the precise grade requirements.

Those interested in graduate study in mathematics are encouraged to take:

- MATH 1130 Functions of Several Variables
- MATH 1140 Functions Of Several Variables
- MATH 1260 Complex Analysis
- MATH 1410 Combinatorial Topology
- MATH 1540 Topics in Abstract Algebra

**Mathematics-Computer Science**

Students may opt to pursue an interdisciplinary Bachelor of Science degree in Math-Computer Science, a concentration administered cooperatively between the mathematics and computer science departments. Course requirements include math- and systems-oriented computer science courses, as well as computational courses in applied math. Students must identify a series of electives that cohere around a common theme. As with other concentrations offered by the Computer Science department, students have the option to pursue the professional track (http://www.cs.brown.edu/ugrad/concentrations/professional.track.html) of the ScB program in Mathematics-Computer Science.

**Requirements for the Standard Track of the Sc.B. degree.**

**Prerequisites**
- Three semesters of Calculus to the level of MATH 0180, MATH 0200, or MATH 0350 3
- MATH 0520 Linear Algebra 1
  - or MATH 0540 Honors Linear Algebra

**Core Courses**
- MATH 1530 Abstract Algebra 1
- Select one of the following series: 2
  - Series A  
    - CSCI 0150 Introduction to Object-Oriented Programming and Computer Science  
    - and Introduction to Algorithms and Data Structures
  - Series B  
    - CSCI 0170 Computer Science: An Integrated Introduction  
    - and Computer Science: An Integrated Introduction
  - Series C  
    - CSCI 0190 Accelerated Introduction to Computer Science  
    - and an additional CS course not otherwise used to satisfy a concentration requirement; this course may be CSCI 0180, an intermediate-level CS course, or a 1000-level CS course
- CSCI 0320 Introduction to Software Engineering
  - or CSCI 0330 Introduction to Computer Systems
- CSCI 0220 Introduction to Discrete Structures and Probability

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Mathematics-Economics

The Mathematics Economics concentration is designed to give a background in economic theory plus the mathematical tools needed to analyze and develop additional theoretical constructions. The emphasis is on the abstract theory itself. Students may choose either the standard or the professional track, both award a Bachelor of Arts degree.

Standard Mathematics-Economics Concentration

Economics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1130</td>
<td>Intermediate Microeconomics (Mathematical)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>Intermediate Macroeconomics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1630</td>
<td>Econometrics I</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1170</td>
<td>Welfare Economics and Social Choice Theory</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1225</td>
<td>Advanced Macroeconomics: Monetary, Fiscal, and Stabilization Policies</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1465</td>
<td>Market Design: Theory and Applications</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1470</td>
<td>Bargaining Theory and Applications</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1640</td>
<td>Econometrics II</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1650</td>
<td>Financial Econometrics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1660</td>
<td>Big Data</td>
<td>1</td>
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<tr>
<td>ECON 1750</td>
<td>Investments II</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1759</td>
<td>Data, Statistics, Finance</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1810</td>
<td>Economics and Psychology</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1820</td>
<td>Behavioral Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1850</td>
<td>Theory of Economic Growth</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1860</td>
<td>The Theory of General Equilibrium</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1870</td>
<td>Game Theory and Applications to Economics</td>
<td>1</td>
</tr>
</tbody>
</table>

One course from the "mathematics-economics" group: 3

- ECON 1301 Economics of Education I
- ECON 1305 Economics of Education: Research
- ECON 1310 Labor Economics
- ECON 1360 Health Economics
- ECON 1410 Urban Economics
- ECON 1480 Public Economics
- ECON 1510 Economic Development
- ECON 1520 The Economic Analysis of Institutions
- ECON 1530 Health, Hunger and the Household in Developing Countries
- ECON 1629 Applied Research Methods for Economists
- ECON 1640 Econometrics II
- ECON 1650 Financial Econometrics
- ECON 1759 Data, Statistics, Finance
- ECON 1765 Finance, Regulation, and the Economy: Research

Two additional 1000-level economics courses: 2

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>MATH 0520</td>
<td>Linear Algebra</td>
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<tr>
<td>MATH 0540</td>
<td>Honors Linear Algebra</td>
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<tr>
<td>Prob Theory - one of the following: 1</td>
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<td></td>
</tr>
<tr>
<td>MATH 1610</td>
<td>Probability</td>
<td>1</td>
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<tr>
<td>MATH 1620</td>
<td>Mathematical Statistics</td>
<td>1</td>
</tr>
<tr>
<td>APMA 1650</td>
<td>Statistical Inference I</td>
<td>1</td>
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</table>

Analysis - one of the following: 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 1010</td>
<td>Analysis: Functions of One Variable</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1130</td>
<td>Functions of Several Variables</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1140</td>
<td>Functions Of Several Variables</td>
<td>1</td>
</tr>
<tr>
<td>Differential Equations - one of the following: 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1110</td>
<td>Ordinary Differential Equations</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1120</td>
<td>Partial Differential Equations</td>
<td>1</td>
</tr>
</tbody>
</table>

One additional course from the Probability, Analysis, and Differential Equations courses listed above: 1

Total Credits: 14

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Honors and Capstone Requirement:

Admission to candidacy for honors in the concentration is granted on the following basis: 3.7 GPA for Economics courses, and 3.5 GPA overall. To graduate with honors, a student must write an honors thesis in senior year following the procedures specified by the concentration (see Economics Department website). Beginning with the class of 2016, students not writing an honors thesis must complete an alternative senior capstone project and obtain approval of a faculty sponsor.

Professional Track

The requirements for the professional track include all those of the standard track, as well as the following:

Students must complete two two-to-four month full-time professional experiences, doing work that is relevant to their concentration programs. Such work is normally done within an industrial organization, but may also be at a university under the supervision of a faculty member.

On completion of each professional experience, the student must write and upload to ASK a reflective essay about the experience addressing the following prompts, to be approved by the student's concentration advisor:

- Which courses were put to use in your summer's work? Which topics, in particular, were important?
- In retrospect, which courses should you have taken before embarking on your summer experience? What are the topics from these courses that would have helped you over the summer if you had been more familiar with them?
- Are there topics you should have been familiar with in preparation for your summer experience, but are not taught at Brown? What are these topics?
- What did you learn from the experience that probably could not have been picked up from course work?
- Is the sort of work you did over the summer something you would like to continue doing once you graduate? Explain.
- Would you recommend your summer experience to other Brown students? Explain.

Medieval Cultures

Medieval Cultures offers two distinct areas of historical focus: the Medieval and the Late Antique. The former focuses on the sixth through the fifteenth centuries, combining interdisciplinary perspectives with in-depth study of one or two related disciplines. Late Antique Cultures deals with the third through the ninth centuries, when ancient cultural forms were still in place but medieval cultures were beginning to take shape simultaneously. The first undergraduate degree of its kind in this country, Late Antique Cultures facilitates the study of human activity in all of its variety. A traditional area of study in Medieval Cultures is Western Europe, but students are encouraged to work in other cultural areas such as Byzantine, Islamic, Judaic and Slavic. The concentration serves students interested in the changing relation of cultural practices, social patterns, political and economic forms, and artistic and literary traditions in this important transitional period.

Medieval Cultures Track

It is recommended that prospective concentrators take the introductory course, Medieval Perspectives, during their freshman or sophomore year.

Requirements

Ten courses approved by the Program in Medieval Studies, including two courses in medieval history and one 1000- or 2000-level course that uses primary texts in a medieval language other than Middle English. Interested students are invited to discuss their plans with an appropriate faculty member of the Program. A concentration proposal should be prepared in consultation with the faculty advisor and submitted to the Program Chair for approval.

Under the supervision of the director of the program, students may choose courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CLAS 0660</td>
<td>The World of Byzantium</td>
</tr>
<tr>
<td>CLAS 1120G</td>
<td>The Idea of Self</td>
</tr>
<tr>
<td>CLAS 1120V</td>
<td>The Age of Constantine: The Roman Empire in Transition</td>
</tr>
<tr>
<td>CLAS 1750L</td>
<td>Erotic Desire in the Premodern Mediterranean</td>
</tr>
<tr>
<td>COLT 0510K</td>
<td>The 1001 Nights</td>
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<tr>
<td>COLT 1813P</td>
<td>Captive Imagination: Writing Prison in the Middle Ages</td>
</tr>
<tr>
<td>ENGL 0100D</td>
<td>Matters of Romance</td>
</tr>
<tr>
<td>ENGL 0150C</td>
<td>The Medieval King Arthur</td>
</tr>
<tr>
<td>ENGL 0300F</td>
<td>Beowulf to Aphra Behn: The Earliest British Literature</td>
</tr>
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<td>ENGL 0310F</td>
<td>Prose Sagas of the Medieval North</td>
</tr>
<tr>
<td>ENGL 1310T</td>
<td>Chaucer: The Canterbury Tales</td>
</tr>
<tr>
<td>ENGL 1311E</td>
<td>History of the English Language</td>
</tr>
<tr>
<td>ENGL 1311H</td>
<td>Sagas Without Borders: Multilingual Literature of Early England</td>
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<td>Europe in the Vernacular</td>
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<tr>
<td>ENGL 1361D</td>
<td>Women's Voices in Medieval Literature</td>
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<tr>
<td>ENGL 1900Y</td>
<td>Medieval Manuscript Studies: Paleography, Codicology, and Interpretation</td>
</tr>
<tr>
<td>ENGL 2360Q</td>
<td>Manuscript, Image, and the Middle English Text</td>
</tr>
<tr>
<td>GREEK 1110Q</td>
<td>Greek Erotic Literature: From Plato to the Medieval Romances</td>
</tr>
<tr>
<td>GREEK 1110T</td>
<td>Rhetors and Philosophers: Intellectual Thought and Sophistic Style in the Ancient World</td>
</tr>
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<td>GREEK 2110F</td>
<td>Greek Palaeography and Premodern Book Cultures</td>
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<tr>
<td>HIAA 0321</td>
<td>Toward a Global Late Antiquity: 200-800 CE</td>
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<td>HIAA 0460</td>
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<td>HIST 0521A</td>
<td>Christianity in Conflict in the Medieval Mediterranean</td>
</tr>
<tr>
<td>HIST 0521M</td>
<td>The Holy Grail and the Historian's Quest for the Truth</td>
</tr>
<tr>
<td>HIST 0621B</td>
<td>The Search for King Arthur</td>
</tr>
<tr>
<td>HIST 1205</td>
<td>The Long Fall of the Roman Empire</td>
</tr>
<tr>
<td>HIST 1210A</td>
<td>The Viking Age</td>
</tr>
<tr>
<td>HIST 1260D</td>
<td>Living Together: Muslims, Christians, and Jews in Medieval Iberia</td>
</tr>
<tr>
<td>HIST 1211</td>
<td>Crusaders and Cathedrals, Deviants and Dominance: Europe in the High Middle Ages</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Honors

This is awarded to students who present a meritorious honors thesis in addition to completing the required courses of the concentration. The thesis permits the student to synthesize various disciplines or interests, or to pursue a new interest in greater depth. To be eligible for Honors, candidates must complete a minimum of six approved courses in Medieval Studies by the end of their third year with more grades of A than B. Students should apply for admission to Honors and should meet with their faculty advisor(s) no later than spring of the junior year to plan the thesis project. Accepted candidates write the thesis in a two-semester course sequence under the supervision of a director and second reader drawn from the Medieval Studies faculty.

Interested students should contact the concentration advisor for further details or consultation (863-1994).

Late Antique Cultures Track

Requirements:

One course in Roman history: 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS 1310</td>
<td>Roman History I: The Rise and Fall of an Imperial Republic</td>
</tr>
<tr>
<td>CLAS 1320</td>
<td>Roman History II: The Roman Empire and Its Impact (recommended)</td>
</tr>
</tbody>
</table>

One class in medieval history 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>RELS 0300</td>
<td>Europe in the Vernacular</td>
</tr>
<tr>
<td>RELS 0310</td>
<td>Medieval Manuscript Studies: Paleography, Codicology, and Interpretation</td>
</tr>
<tr>
<td>RELS 0320</td>
<td>The Medieval King Arthur</td>
</tr>
<tr>
<td>RELS 0330</td>
<td>Muslims, Jews and Christians in Medieval Iberia</td>
</tr>
<tr>
<td>RELS 0340</td>
<td>The Medieval Grail and the Historian's Quest for the Truth</td>
</tr>
</tbody>
</table>

One course at the advanced level (numbered at least 1000) in one approved language 1

<table>
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<th>Title</th>
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</thead>
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<tr>
<td>CLAS 1320</td>
<td>Roman History II: The Roman Empire and Its Impact (recommended)</td>
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<td>RELS 0340</td>
<td>The Medieval Grail and the Historian's Quest for the Truth</td>
</tr>
</tbody>
</table>

Six other courses drawn from appropriate offerings and with the approval of the concentration advisor. These courses should support a concentrational area of special interest.

Total Credits 9

1 The language in most cases will be Latin, but students will present different competencies and interests; other languages, such as Greek, Hebrew, or one of the medieval vernaculars can be substituted for Latin, with the approval of the concentration advisor and in conjunction with a clearly articulated program of study.

Under the supervision of the director of the program, students may choose courses from the following:

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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Honors

When in Late Antique Cultures, these are awarded to students who present a meritorious honors thesis in addition to completing the required courses of the concentration. Application for admission to honors should be made in the spring of the junior year, by which time honors candidates must have completed a minimum of six approved courses in Late Antique and the social sciences. Regardless of one’s passions – whether history, religion, politics, culture, literature, modern media, philosophy or practices of everyday life – the Middle East is an ideal site for considering the diversity and complexity of the human experience. A growing number of exciting courses, creative and relevant programming, and a steady stream of post-docs and visiting professors offer unparalleled opportunities for MES concentrators who wish to understand this region and to engage with a broad range of issues that affect our world.

Middle East Studies

Middle East Studies (MES) is an interdisciplinary concentration that draws upon courses offered by a distinguished core faculty in the humanities and the social sciences. Regardless of one’s passions – whether history, religion, politics, culture, literature, modern media, philosophy or practices of everyday life – the Middle East is an ideal site for considering the diversity and complexity of the human experience. A growing number of exciting courses, creative and relevant programming, and a steady stream of post-docs and visiting professors offer unparalleled opportunities for MES concentrators who wish to understand this region and to engage with a broad range of issues that affect our world.

Standard Program for the AB Degree - Effective for the Class of 2020

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1968</td>
<td>Approaches to The Middle East</td>
<td>1</td>
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<tr>
<td>HIST 0155</td>
<td>Cultures of the Contemporary Middle East</td>
<td>2</td>
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<tr>
<td>ANTH 1151</td>
<td>Ethnographies of the Muslim Middle East</td>
<td></td>
</tr>
<tr>
<td>HIST 1200</td>
<td>Visual Politics in the Contemporary Middle East</td>
<td></td>
</tr>
<tr>
<td>COLT 0812H</td>
<td>Literary Bestsellers of the Islamic World</td>
<td></td>
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<tr>
<td>HIST 0820</td>
<td>Middle East Beginnings</td>
<td></td>
</tr>
<tr>
<td>HIST 0243</td>
<td>Modern Middle East Roots: 1492 to the Present</td>
<td></td>
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<tr>
<td>HIST 0244</td>
<td>Understanding the Middle East: 1800s to the Present</td>
<td></td>
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<tr>
<td>HIST 1455</td>
<td>The Making of the Modern Middle East</td>
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<tr>
<td>RELS 0150</td>
<td>Islam Unveiled</td>
<td></td>
</tr>
<tr>
<td>POLS 1270</td>
<td>Middle East Politics</td>
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</tr>
</tbody>
</table>

Language Semesters: Basic competence in at least one of the modern Middle Eastern Languages is required. This entails taking at least six semesters of coursework in one of the modern Middle Eastern languages such as Arabic, Persian, Hebrew, Turkish, etc.

Electives: Two courses chosen from the list of courses that are cross-listed by Middle East Studies and approved by the Concentration advisor. Students should acquire a good balance of courses by taking courses in the humanities and social sciences. Students should also seek a good balance between courses whose primary subject matter is pre-modern (ancient and medieval) and modern and contemporary Middle East.

Capstone/Honors Project: This can take many forms such as:

- A paper of approximately 30 pages for an existing concentration-eligible (MES-coded or X-Listed) WRIT-designated course, undertaken with the permission of the instructor
- b. An independent study or project (artistic, research, or otherwise) supervised by at least one faculty member for at least one semester under MES 1970 - Independent Study designation.
- c. An Honors Thesis

Total Credits: 12

1 Two semesters of Independent Study (MES 1970) are required for honors and will raise the number of required courses to 13.

Standard Program for the AB Degree - Effective through the Class of 2019

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1968</td>
<td>Approaches to The Middle East</td>
<td>1</td>
</tr>
<tr>
<td>HIST 0155</td>
<td>Cultures of the Contemporary Middle East</td>
<td></td>
</tr>
<tr>
<td>ANTH 1151</td>
<td>Ethnographies of the Muslim Middle East</td>
<td></td>
</tr>
<tr>
<td>HIST 1200</td>
<td>Visual Politics in the Contemporary Middle East</td>
<td></td>
</tr>
<tr>
<td>COLT 0812H</td>
<td>Literary Bestsellers of the Islamic World</td>
<td></td>
</tr>
<tr>
<td>HIST 0240</td>
<td>Middle East Beginnings</td>
<td></td>
</tr>
<tr>
<td>HIST 0243</td>
<td>Modern Middle East Roots: 1492 to the Present</td>
<td></td>
</tr>
<tr>
<td>HIST 0244</td>
<td>Understanding the Middle East: 1800s to the Present</td>
<td></td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Modern Culture and Media

Modern Culture and Media (MCM) is an interdisciplinary concentration that explores the ties between media and broader cultural and social formations. We stress creative thinking and critical production: comparative analysis and theoretical reflection, as well as work that integrates practice and theory. We thus bring together aspects of modern literature, theory, media, art or culture. Examples of areas of interest include but are not limited to film, gender/sexuality, digital media, television, post-coloniality, the novel, modern thought, the modern arts, sound, and theories of ideology and subjectivity. Productive work in some modern medium or textual mode is encouraged for all concentrators.

MCM’s approach to production recognizes the inextricable link between theory and practice, and the possibility of a fruitful complicity between them. Production, in the sense defined here, is a theoretically informed sphere or practice, one within which acknowledged forms of cultural creation are tested and extended in close complementarity with the analyses conducted elsewhere in MCM.

Track I consists of 11 courses.

Core courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM 0150</td>
<td>Text/Media/Culture: Theories of Modern Culture and Media</td>
<td>1</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM 0220</td>
<td>Print Cultures: Textuality and the History of Books</td>
</tr>
<tr>
<td>MCM 0230</td>
<td>Digital Media</td>
</tr>
<tr>
<td>MCM 0240</td>
<td>Television Studies</td>
</tr>
<tr>
<td>MCM 0250</td>
<td>Visuality and Visual Theories</td>
</tr>
<tr>
<td>MCM 0260</td>
<td>Cinematic Coding and Narrativity</td>
</tr>
<tr>
<td>MCM 1110</td>
<td>The Theory of the Sign</td>
</tr>
</tbody>
</table>

Additional courses

One must be an upper level course from the MCM 1200 series.
Two must be senior seminars from the MCM 1500 or MCM 1700 series.
Two must be at any level in MCM above MCM 0260.

Three additional courses. These courses must be in MCM or in related departments.

Total Credits: 11

Honors:

The honors program in MCM is designed for students who wish to integrate their skills in a special project. Students who qualify for Honors in Track I are eligible to apply to do an Honors project or thesis. Students should submit a letter of intent in their 6th semester, and a formal proposal by the first day of their 7th semester. Applications will be screened by the MCM Honors Committee. (Application forms are available in the MCM office.) If approved, a student must then register for MCM 1970, a one-credit course which can count towards their Focus Area requirements, and studies that examine the categories of cultural analysis: for example, the distinction between high and low culture. Examples of areas of interest include but are not limited to film, gender/sexuality, digital media, television, post-coloniality, the novel, modern thought, the modern arts, sound, and theories of ideology and subjectivity. Productive work in some modern medium or textual mode is encouraged for all concentrators.

MCM's approach to production recognizes the inextricable link between theory and practice, and the possibility of a fruitful complicity between them. Production, in the sense defined here, is a theoretically informed sphere or practice, one within which acknowledged forms of cultural creation are tested and extended in close complementarity with the analyses conducted elsewhere in MCM.

Track I consists of 11 courses.

Core courses

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM 0150</td>
<td>Text/Media/Culture: Theories of Modern Culture and Media</td>
<td>1</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM 0220</td>
<td>Print Cultures: Textuality and the History of Books</td>
</tr>
<tr>
<td>MCM 0230</td>
<td>Digital Media</td>
</tr>
<tr>
<td>MCM 0240</td>
<td>Television Studies</td>
</tr>
<tr>
<td>MCM 0250</td>
<td>Visuality and Visual Theories</td>
</tr>
<tr>
<td>MCM 0260</td>
<td>Cinematic Coding and Narrativity</td>
</tr>
<tr>
<td>MCM 1110</td>
<td>The Theory of the Sign</td>
</tr>
</tbody>
</table>

Additional courses

One must be an upper level course from the MCM 1200 series.
Two must be senior seminars from the MCM 1500 or MCM 1700 series.
Two must be at any level in MCM above MCM 0260.

Three additional courses. These courses must be in MCM or in related departments.

Total Credits: 11

Honors:

The honors program in MCM is designed for students who wish to integrate their skills in a special project. Students who qualify for Honors in Track I are eligible to apply to do an Honors project or thesis. Students should submit a letter of intent in their 6th semester, and a formal proposal by the first day of their 7th semester. Applications will be screened by the MCM Honors Committee. (Application forms are available in the MCM office.) If approved, a student must then register for MCM 1970, a one-credit course which can count towards their Focus Area requirements, and
MCM1990, a one-credit thesis course in which they complete the Honors project/thesis.

**Track II**

Track II concentration combines production courses with the critical study of the cultural role of practice. It aims to engage students in the analysis of theories of production elaborated within philosophical, artistic, and technological traditions, while encouraging them to produce works that interrogate these traditions.

**Track II consists of 11 courses:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM 0150</td>
<td>Text/Media/Culture: Theories of Modern Culture and Media</td>
<td>1</td>
</tr>
<tr>
<td>MCM 0710</td>
<td>Introduction to Filmic Practice: Time and Form</td>
<td>1</td>
</tr>
<tr>
<td>MCM 0730</td>
<td>Introduction to Video Production: Critical Strategies and Histories</td>
<td>1</td>
</tr>
<tr>
<td>MCM 0750</td>
<td>Art in Digital Culture</td>
<td>1</td>
</tr>
<tr>
<td>VISA 0100</td>
<td>Studio Foundation</td>
<td>1</td>
</tr>
<tr>
<td>VISA 0110</td>
<td>Advanced Studio Foundation</td>
<td>1</td>
</tr>
<tr>
<td>VISA 0120</td>
<td>Foundation Media: Sound and Image</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 0200</td>
<td>Computers and Music</td>
<td>1</td>
</tr>
<tr>
<td>CSCI 0150</td>
<td>Introduction to Object-Oriented Programming and Computer Science</td>
<td>1</td>
</tr>
<tr>
<td>A course from the LITR 0110 series</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>A course from the LITR 0210 series</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>One senior seminar from the MCM 1700 series or other 1 equivalent in production</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

- **Total Credits:** 11

**Honors:**

The honors program in MCM is designed for students who wish to integrate their skills in a special project. Students who qualify for Honors in Track II are eligible to apply to do an Honors project or thesis. Students should submit a letter of intent in their 6th semester, and a formal proposal by the first day of their 7th semester. Applications will be screened by the MCM Honors Committee. (Application forms are available in the MCM office.) If approved, a student must then register for MCM1970, a one-credit course which can count towards their Focus Area requirements, and MCM1990, a one-credit thesis course in which they complete the Honors project/thesis.

**Music**

The concentration in Music integrates theory, history, ethnomusicology, technology, composition, and performance. Students may select from among three tracks within the concentration: the first track emphasizes theory, history, and composition; a second track emphasizes ethnomusicology; and a third track focuses on computer music and multimedia. The Music curriculum is supported by the Orwig Music Library, a state-of-the-art facility with holdings of over 40,000 books and scores and an equal number of sound and video recordings. Concentrators are encouraged to participate in one or more of the departmentally sponsored performing organizations: Chorus, Orchestra, Jazz Band, Wind Symphony, Chamber Music Performance, Electroacoustic Ensemble, Sacred Harp/Shape-Note Singing, Old-time String Band, Javanese Gamelan, or Ghanaian Drumming.

MUSC 0550 and MUSC 0560 are prerequisites for many upper-level music courses and are required for all three concentration tracks. These courses lay the foundation for an understanding of the structure of Western music, and develop the musicianship and keyboard skills expected of all concentrators. Students considering a concentration in Music should complete this sequence as early as possible, preferably by the end of sophomore year.

The Department of Music does not award course credit for Advanced Placement (A.P.) courses. Students may receive placement credit for MUSC 0550 and/or MUSC 0560, however. Students interested in placing out of MUSC 0550-MUSC 0560 must take the theory placement test administered during the first class meeting of MUSC 0550 at the beginning of the fall semester. Each student who passes the test will consult with the director of the course to work out individual arrangements for placement credit.

Participation in one or more of the departmentally sponsored performing organizations is highly recommended: Chorus, Orchestra, Jazz Band, Wind Symphony, Chamber Music Performance, Electroacoustic Ensemble, Sacred Harp/Shape-Note Singing, Old-time String Band, Javanese Gamelan, Brazilian Choro Ensemble, or Ghanaian drumming. All music courses—including performance courses—are open to all Brown students, provided that they have satisfied the prerequisites.

**Concentration Requirements:**

**History/Theory/Composition Track:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 0550</td>
<td>Theory of Tonal Music (offered every fall)</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 0560</td>
<td>Theory of Tonal Music (offered every spring)</td>
<td>1</td>
</tr>
</tbody>
</table>

**History**

Select two of the following (the third is optional): 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 0910</td>
<td>Medieval and Renaissance Music</td>
</tr>
<tr>
<td>MUSC 0920</td>
<td>Baroque and Classic Music</td>
</tr>
<tr>
<td>MUSC 0930</td>
<td>Romantic and Modern Music</td>
</tr>
</tbody>
</table>

**Advanced Theory**

Any two (2) courses in theory and analysis (MUSC 1020-1090) are required, in no particular order. At the beginning of each academic year a list of offered courses fulfilling this requirement will be provided at the department. For example:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1020</td>
<td>Modal Counterpoint (usually offered every other fall)</td>
</tr>
<tr>
<td>MUSC 1030</td>
<td>Tonal Counterpoint (usually offered every other fall)</td>
</tr>
<tr>
<td>MUSC 1040</td>
<td>Advanced Music Theory I (usually offered every other fall)</td>
</tr>
<tr>
<td>MUSC 1050</td>
<td>Advanced Music Theory II (usually offered every other fall)</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Music After 1945

Advanced Musicianship

MUSC 1010 Advanced Musicianship I (offered every fall) 0.5
MUSC 1011 Advanced Musicianship II (offered every spring) 0.5

Ethnomusicology

MUSC 1900 Introduction to Ethnomusicology (usually offered annually) 1

Electives:

Three upper-level courses are required (i.e., no course below MUSC 0570): 3

Total Credits 11

1 Prerequisite: MUSC 0560
2 Should be taken before the senior year.
3 1600-level seminars are preferred. Up to two full Applied Music or ensemble credits (i.e., four semesters) may be applied to the concentration requirements.

Ethnomusicology Track:

Music Theory

MUSC 0550 Theory of Tonal Music (offered every fall) 1
MUSC 0560 Theory of Tonal Music (offered every spring) 1

Other Foundational Courses

ANTH 0100 Introduction to Cultural Anthropology 1
MUSC 1900 Introduction to Ethnomusicology (usually offered annually) 1

History

Select two of the following (the third is optional): 2

MUSC 0910 Medieval and Renaissance Music
MUSC 0920 Baroque and Classic Music
MUSC 0930 Romantic and Modern Music

Electives in Ethnomusicology

Four additional courses in ethnomusicology numbered 1000 or higher are required. 2

Total Credits 10

1 Should be taken before the senior year.
2 For a list of qualifying courses, see the Concentration Advisor.

Computer Music and Multimedia Track:

Music Theory

MUSC 0550 Theory of Tonal Music (offered every fall) 1
MUSC 0560 Theory of Tonal Music (offered every spring) 1

Computer Music Foundation

MUSC 0200 Computers and Music 1
MUSC 1200 Seminar in Electronic Music: Recording Studio as Compositional Tool
MUSC 1210 Seminar in Electronic Music: Real-Time Systems

Musicology Ethnomusicology Elective

One scholarly course numbered above MUSC 0900 1

Electives:

Four elective courses selected in any combination from the following groups:

- Computer Music and Multimedia courses, MUSC 1220–1290
- MUSC 2200–2290
- Theory and composition courses, MUSC 1020–1190

Total Credits 14
1 For a list of qualifying courses, see the concentration advisor.

Neuroscience

Neuroscience is an interdisciplinary field that seeks to understand the functions and diseases of the nervous system. It draws on knowledge from neurobiology as well as elements of psychology and cognitive science, and mathematical and physical principles involved in modeling neural systems. Through the Neuroscience concentration, students develop foundational knowledge through courses in biology, chemistry, and mathematics as well as three core courses in neuroscience. They are also required to develop facility with research methodologies (through courses in statistics and laboratory methods) before moving into specific topics in the field (e.g., visual physiology, neurochemistry and behavior, and synaptic transmission and plasticity). Members of the Neuroscience faculty are affiliated with the Brown Institute for Brain Science, a multidisciplinary program that promotes collaborative research about the brain. Prospective concentrators should contact Elyse_Netto@brown.edu in order to have a faculty advisor assigned to them.

Standard program for the Sc.B. degree

The concentration combines a general science background with a number of specific courses devoted to the cellular, molecular, and integrative functions of the nervous system. The concentration allows considerable flexibility for students to tailor a program to their individual interests. Elective courses focus on a variety of areas including molecular mechanisms, cellular function, sensory and motor systems, neuropharmacology, learning and memory, animal behavior, cognitive function, bioengineering, theoretical neuroscience and computer modeling.

The concentration in neuroscience leads to an Sc.B. degree. The following background courses, or their equivalent, are required for the degree:

**Background Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
<td>1</td>
</tr>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part II</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0030</td>
<td>Basic Physics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0040</td>
<td>Basic Physics</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0200</td>
<td>The Foundation of Living Systems</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0330</td>
<td>Equilibrium, Rate, and Structure</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td>1</td>
</tr>
</tbody>
</table>

**Core Concentration Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUR 0100</td>
<td>The Brain: An Introduction to Neuroscience</td>
<td>1</td>
</tr>
<tr>
<td>NEUR 1020</td>
<td>Principles of Neurobiology</td>
<td>1</td>
</tr>
<tr>
<td>NEUR 1030</td>
<td>Neural Systems</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>One neuroscience lab course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One critical reading course</td>
<td></td>
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<td></td>
<td>One statistics course</td>
<td></td>
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<tr>
<td></td>
<td>Four electives related to neuroscience</td>
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</tr>
</tbody>
</table>

Total Credits 17

1 Independent study and honors research projects are encouraged.

Philosophy

The Philosophy concentration offers courses covering subjects from the philosophy of religion to the philosophies of science and literature. It also provides survey courses on various periods in the history of philosophy. Concentrators can expect to strengthen their knowledge of and skills in ancient philosophy, early modern philosophy, logic, epistemology and metaphysics. Students are asked to identify an area of specialization.
There is also a related, but separate concentration in physics and philosophy.

**Standard Concentration**

10 courses total, of which no more than one may be below PHIL 0350, and at least three must be at or above PHIL 0990.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 0350</td>
<td>Ancient Philosophy</td>
</tr>
<tr>
<td>PHIL 1250</td>
<td>Aristotle</td>
</tr>
<tr>
<td>PHIL 1260</td>
<td>Plato</td>
</tr>
<tr>
<td>PHIL 1310</td>
<td>Myth and the Origins of Science</td>
</tr>
<tr>
<td>PHIL 0360</td>
<td>Early Modern Philosophy</td>
</tr>
<tr>
<td>PHIL 1700</td>
<td>British Empiricists</td>
</tr>
<tr>
<td>PHIL 1710</td>
<td>17th Century Continental Rationalism</td>
</tr>
<tr>
<td>PHIL 1720</td>
<td>Kant: The Critique of Pure Reason</td>
</tr>
<tr>
<td>PHIL 1660</td>
<td>Metaphysics</td>
</tr>
<tr>
<td>PHIL 1750</td>
<td>Epistemology</td>
</tr>
<tr>
<td>PHIL 1760</td>
<td>Philosophy of Language</td>
</tr>
<tr>
<td>PHIL 1770</td>
<td>Philosophy of Mind</td>
</tr>
<tr>
<td>PHIL 0500</td>
<td>Moral Philosophy</td>
</tr>
<tr>
<td>PHIL 0560</td>
<td>Political Philosophy</td>
</tr>
<tr>
<td>PHIL 1640</td>
<td>The Nature of Morality</td>
</tr>
<tr>
<td>PHIL 1650</td>
<td>Moral Theories</td>
</tr>
<tr>
<td>PHIL 0540</td>
<td>Logic</td>
</tr>
<tr>
<td>PHIL 1630</td>
<td>Mathematical Logic</td>
</tr>
<tr>
<td>PHIL 1880</td>
<td>Advanced Deductive Logic</td>
</tr>
</tbody>
</table>

One course in Ancient Philosophy, e.g.  
PHIL 0350 Ancient Philosophy  
PHIL 1250 Aristotle  
PHIL 1260 Plato  
PHIL 1310 Myth and the Origins of Science  
One course in Early Modern Philosophy, e.g.  
PHIL 0360 Early Modern Philosophy  
PHIL 1700 British Empiricists  
PHIL 1710 17th Century Continental Rationalism  
PHIL 1720 Kant: The Critique of Pure Reason  
One course in Epistemology or Metaphysics, e.g.  
PHIL 1660 Metaphysics  
PHIL 1750 Epistemology  
PHIL 1760 Philosophy of Language  
PHIL 1770 Philosophy of Mind  
One course in Ethics or Political Philosophy, e.g.  
PHIL 0500 Moral Philosophy  
PHIL 0560 Political Philosophy  
PHIL 1640 The Nature of Morality  
PHIL 1650 Moral Theories  
One course in Logic, e.g.  
PHIL 0540 Logic  
PHIL 1630 Mathematical Logic  
PHIL 1880 Advanced Deductive Logic  
One seminar  

A course from the PHIL 0990 series  
Or any seminar at the 2000-level, which may be counted for one of the other requirements  
Specialization: Three related courses from one single area of philosophy: e.g., logic and language; philosophy of science; epistemology; philosophy of mind; moral philosophy; political philosophy; ancient philosophy, etc. See Notes below for further details.

**Capstone**

Reading Course (PHIL 1990): a reading course for one semester involving one professor and one student, leading to the preparation of a substantial research paper on a particular topic. The Reading Course may accompany a 1000-level course being taken concurrently. In this case, the 1000-level course would consist of a deeper foray into the topic. A one-semester Reading Course may also be a first step towards writing an Honors Thesis.

Senior Seminar (PHIL 0990): Seminars aimed primarily at advanced undergraduates, on varying topics each year, requiring the completion of a substantial research paper.

Graduate Seminar (PHIL 2000-level): seminars mainly aimed at graduate students, but also open to advanced undergraduates, requiring the completion of a substantial research paper.

Honors Thesis: a piece of work expected to be more substantial than the above-mentioned research papers, typically researched and written over the course of the entire senior year (possibly starting with a relevant Reading Course in the first semester) under the supervision of a thesis advisor (possibly, though not necessarily, the specialization advisor). For honors, see below.

### Notes:

- No more than one course may fulfill both a general distribution requirement and a specialization requirement.
- No more than two courses from departments other than the philosophy department may be counted among the ten courses required for the concentration; no more than one of these two outside courses may count toward the three specialization requirements.
- The specialization and the courses that will fulfill it are standardized declared at some point in the course of the Junior year. Those making a Concentration Declaration at an earlier time (e.g. at the end of their Sophomore year) may make a provisional choice of courses which can be revised at a later date with the approval of the department’s DUS (Director of Undergraduate Studies).
- Concentrators who aim at a general acquaintance with the discipline of philosophy may forgo a specialization and devise an appropriately balanced program of courses beyond the requirements with the approval of the DUS.

### Honors Requirements:

- Philosophy GPA must be greater than 3.5. (This refers to the GPA at the beginning of the senior year in all philosophy courses, and including at least six courses).
- Thesis (see Capstone Options)

### Prior Concentration Requirements

For declarations made prior to January 2013, there was one standard concentration in Philosophy with two optional tracks. For requirements please refer to the Bulletin Archive from prior years.

### Physics

Physics is the scientific study of the fundamental principles governing the behavior of matter and the interaction of matter and energy. Mathematics is used to describe fundamental physical principles, the behavior of matter, and the interactions of matter and energy. As the most fundamental of sciences, physics provides a foundation for other scientific fields as well as the underpinnings of modern technology. The Physics department is unique because of the breadth of its faculty expertise and research, and the relatively intimate size of its classes above the introductory level. Physics concentrators may choose to pursue either the A.B. or the more intensive Sc.B. degree. Course work on either path covers a broad base of topics (for example, electricity and magnetism, classical and quantum mechanics, thermodynamics, and statistical mechanics). The Sc.B. degree requires additional advanced topics as well as a senior thesis project.

### Standard concentration for the A.B. degree

Select one of the following Series:

- PHYS 0070 & PHYS 0160: Analytical Mechanics and Introduction to Relativity and Quantum Physics
- PHYS 0030 & PHYS 0040: Basic Physics and Basic Physics
- PHYS 0050 & PHYS 0060: Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics
- PHYS 0470: Electricity and Magnetism
- PHYS 0500: Advanced Classical Mechanics
- PHYS 0560: Experiments in Modern Physics
- PHYS 1410: Quantum Mechanics A

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Standard program for the Sc.B. degree

Prerequisites:
Select one of the following series:

- PHYS 0070 & PHYS 0160 Analytical Mechanics and Introduction to Relativity and Quantum Physics
- PHYS 0050 & PHYS 0060 Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics

Select one of the following:

- MATH 0190 Advanced Placement Calculus (Physics/Engineering)
- Or MATH 0090, MATH 0100

Program:

- PHYS 0470 Electricity and Magnetism
- PHYS 0500 Advanced Classical Mechanics
- PHYS 0560 Experiments in Modern Physics
- PHYS 1410 Quantum Mechanics A
- PHYS 1420 Quantum Mechanics B
- PHYS 1510 Advanced Electromagnetic Theory
- PHYS 1530 Thermodynamics and Statistical Mechanics
- PHYS 1560 Modern Physics Laboratory
- PHYS 1980 Undergraduate Research in Physics

One additional 1000 or 2000 level Physics course or upper level course in related fields of science chosen by the student with agreement of his or her advisor.

Four Mathematics courses beyond MATH 0190 or 0090, 0100 including choices from Applied Mathematics:

- PHYS 1990 Senior Conference Course

| Total Credits | 18 |

Honors

Candidates for honors in physics will be expected to pursue a more rigorous and extensive program than those merely concentrating in the subject. In addition they will be required to begin an honors thesis during the seventh semester and to complete it (as part of PHYS 1990) during the eighth semester. Honors candidates are also expected to take a special oral examination on the thesis at the end of the eighth semester. Further details about the program may be obtained from the chair of the department or the departmental honors advisor.

Astrophysics Track for the Sc.B. degree

Prerequisites:

Select one of the following Series:

- PHYS 0070 & PHYS 0160 Analytical Mechanics and Introduction to Relativity and Quantum Physics
- PHYS 0050 & PHYS 0060 Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics
- PHYS 0270 Introduction to Astronomy

Select one of the following Series:

- MATH 0170 & MATH 0180 Advanced Placement Calculus and Intermediate Calculus
- MATH 0190 & MATH 0200 Advanced Placement Calculus (Physics/Engineering) and Intermediate Calculus (Physics/Engineering)
- MATH 0350 Honors Calculus (or equivalent)
- PHYS 0470 Electricity and Magnetism

Program:

- MATH 0520 Linear Algebra
- or MATH 0540 Honors Linear Algebra
- or PHYS 0720 Methods of Mathematical Physics

Select one of the following Math courses:

- APMA 0330 Methods of Applied Mathematics I, II
- APMA 0340 Methods of Applied Mathematics I, II
- APMA 0350 Applied Ordinary Differential Equations
- APMA 0360 Applied Partial Differential Equations
- MATH 1110 Ordinary Differential Equations
- MATH 1120 Partial Differential Equations
- PHYS 0500 Advanced Classical Mechanics
- PHYS 0560 Experiments in Modern Physics
- PHYS 1410 Quantum Mechanics A
- PHYS 1530 Thermodynamics and Statistical Mechanics

Three of the following:

- PHYS 1100 Introduction to General Relativity
- PHYS 1250 Stellar Structure and the Interstellar Medium
- PHYS 1270 Extragalactic Astronomy and High-Energy Astrophysics
- PHYS 1280 Introduction to Cosmology

Two additional 1000- or 2000-level courses in physics or a related field which are not listed as requirements.

- PHYS 1990 Senior Conference Course

| Total Credits | 18 |

Biological Physics Track for the Sc.B. degree

Foundations of Physics

- PHYS 0070 Analytical Mechanics
- or PHYS 0050 Foundations of Mechanics
- or ENGN 0040 Dynamics and Vibrations
- or PHYS 0160 Introduction to Relativity and Quantum Physics
- or PHYS 0060 Foundations of Electromagnetism and Modern Physics
- PHYS 0470 Electricity and Magnetism
- PHYS 0500 Advanced Classical Mechanics
- PHYS 1410 Quantum Mechanics A
- PHYS 1530 Thermodynamics and Statistical Mechanics

Select one of the following Series:

- Series A
  - PHYS 0720 Methods of Mathematical Physics
- Series B
  - Select one of the following:
    - APMA 0330 Methods of Applied Mathematics I, II

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Undergraduate Concentrations

**APMA 0350** Applied Ordinary Differential Equations

**MATH 1110** Ordinary Differential Equations

And select one of the following:

- **MATH 0180** Intermediate Calculus
- **MATH 0200** Intermediate Calculus (Physics/Engineering)
- **MATH 0350** Honors Calculus
- **MATH 0520** Linear Algebra
- **MATH 0540** Honors Linear Algebra

**Basic Biology and Chemistry**

- **BIOL 0200** The Foundation of Living Systems (or placement out of BIOL 0200)
- **BIOL 0500** Cell and Molecular Biology
- **CHEM 0330** Equilibrium, Rate, and Structure

**Advanced Biophysical Topics and Techniques**

- **PHYS 1610** Biological Physics
- **PHYS 1990** Senior Conference Course

**Elective Courses (four chosen from the following list, with at least two 1000-level courses, or additional courses approved by the concentration advisor):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APMA 0360</td>
<td>Applied Partial Differential Equations I</td>
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<tr>
<td>APMA 0410</td>
<td>Mathematical Methods in the Brain Sciences</td>
<td></td>
</tr>
<tr>
<td>APMA 0650</td>
<td>Essential Statistics</td>
<td></td>
</tr>
<tr>
<td>APMA 1070</td>
<td>Quantitative Models of Biological Systems</td>
<td></td>
</tr>
<tr>
<td>APMA 1080</td>
<td>Inference in Genomics and Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 0280</td>
<td>Introductory Biochemistry</td>
<td></td>
</tr>
<tr>
<td>BIOL 0470</td>
<td>Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 1050</td>
<td>Biology of the Eukaryotic Cell</td>
<td></td>
</tr>
<tr>
<td>BIOL 1200</td>
<td>Protein Biochemistry and Structure</td>
<td></td>
</tr>
<tr>
<td>BIOL 1270</td>
<td>Advanced Biochemistry</td>
<td></td>
</tr>
<tr>
<td>BIOL 1870</td>
<td>Techniques and Clinical Applications in Pathobiology</td>
<td></td>
</tr>
<tr>
<td>CHEM 0350</td>
<td>Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 0360</td>
<td>Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
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</tr>
<tr>
<td>MATH 0170</td>
<td>Advanced Placement Calculus</td>
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</tr>
<tr>
<td>MATH 0190</td>
<td>Advanced Placement Calculus (Physics/Engineering)</td>
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</tr>
<tr>
<td>MATH 1610</td>
<td>Probability</td>
<td></td>
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<tr>
<td>MATH 1620</td>
<td>Mathematical Statistics</td>
<td></td>
</tr>
<tr>
<td>PHYS 0560</td>
<td>Experiments in Modern Physics</td>
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</tr>
<tr>
<td>PHYS 1510</td>
<td>Advanced Electromagnetic Theory</td>
<td></td>
</tr>
<tr>
<td>PHYS 1560</td>
<td>Modern Physics Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHYS 2620F</td>
<td>Selected Topics in Molecular Biophysics</td>
<td></td>
</tr>
<tr>
<td>PHYS 1990</td>
<td>Senior Conference Course</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credits: 17-18

1. Select Series A alone or two from Series B as indicated.
2. A senior thesis is required. This is to be prepared in connection with the direction of a faculty supervisor. The topic may be in a related department or of interdisciplinary nature. In any event, a dissertation must be submitted.

### Mathematical Physics Track for the A.B. degree

#### Prerequisites:

- MATH 0090 Introductory Calculus, Part I
- or MATH 0100 Introductory Calculus, Part II

#### Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1005</td>
<td>Foundations of Electromagnetism and Modern Physics</td>
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<tr>
<td>or PHYS 0160</td>
<td>Introduction to Relativity and Quantum Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 0470</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0505</td>
<td>Advanced Classical Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0560</td>
<td>Experiments in Modern Physics</td>
<td>1</td>
</tr>
</tbody>
</table>

Select at least two of the following:

- PHYS 1410 Quantum Mechanics A
- PHYS 1420 Quantum Mechanics B
- PHYS 1510 Advanced Electromagnetic Theory
- PHYS 1530 Thermodynamics and Statistical Mechanics
- PHYS 1560 Modern Physics Laboratory

Total Credits: 12

1. Concentrators are required to take at least one course in mathematics and one in physics in each of their last two semesters.

### Mathematical Physics Track for the Sc.B. degree

#### Prerequisites:

Select one of the following series:

1. PHYS 0070 & PHYS 0160 Analytical Mechanics and Introduction to Relativity and Quantum Physics
2. PHYS 0050 & PHYS 0060 Foundations of Mechanics and Foundations of Electromagnetism and Modern Physics

Select one of the following:

- MATH 0190 Advanced Placement Calculus (Physics/Engineering)
- MATH 0090 Introductory Calculus, Part I
- or MATH 0100 Introductory Calculus, Part II

#### Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 0470</td>
<td>Electricity and Magnetism</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0505</td>
<td>Advanced Classical Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 0560</td>
<td>Experiments in Modern Physics</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1410</td>
<td>Quantum Mechanics A</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1530</td>
<td>Thermodynamics and Statistical Mechanics</td>
<td>1</td>
</tr>
</tbody>
</table>

1. MATH 0180 Intermediate Calculus
2. or MATH 0200 Intermediate Calculus (Physics/Engineering)

or MATH 0350 Honors Calculus

MATH 0520 Linear Algebra

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Physics and Philosophy

The Physics and Philosophy concentration is for students with a deep interest in physics who do not need to acquire the laboratory and computational skills of a professional physicist. The concentration allows students to grapple with computational problems and deepen their investigation of conceptual and epistemological issues. By the end of the program, concentrators possess an excellent conceptual understanding of the most philosophically interesting physics, relativity and quantum mechanics.

This concentration should prepare a student either for graduate study, especially in a history and philosophy of science (HPS) program, or for employment in science education or journalism. Other professions such as law and medicine will look favorably on such concentrators for having versatile interests and being able to master difficult material. The concentration may serve as an excellent preparation for a law school since physics and philosophy both exercise a rigorous approach to problems of immediate relevance to life but at the same time assume two complimentary and sometimes competing viewpoints.

Curriculum

The curriculum builds around the fields of physics that have had the biggest impact on philosophy, especially Quantum Physics, and the fields of philosophy most relevant for physics, such as Epistemology, Metaphysics and Philosophy of Physics. It is strongly recommended that students complete at least one relevant history course.

There are 11 required courses (5 in Physics or History, one course in mathematics) and a final project. The choice of the courses is dictated by the following considerations. The field of physics with both deepest philosophical implications and deepest influence on the rest of physics is Quantum Mechanics. Thus, a 1000-level course in Quantum Mechanics or a closely related field such as Statistical Mechanics is indispensable. The second field of physics most relevant for the concentration is Relativity. This field touches upon and serves as a foundation for a broad list of subjects with major philosophical implications of their own, for example: PHYS 1170, PHYS 1280, PHYS 1510, PHYS 1100. This requires another 1000-level physics course in the concentration. 1000-level Physics courses cannot be taken without certain preliminary work, most importantly, PHYS 0470, which serves as a prerequisite for most higher-level physics courses and which relies in turn on PHYS 0160 or PHYS 0060. Another lower-level physics course is necessary for a student to develop familiarity with the tools which have been employed in producing the physics knowledge.

A natural introduction into philosophy of physics comes from a course in Early Modern Philosophy. To a large extent, Early Modern Philosophy was shaped by scholars who combined interest in philosophy and physics (e.g., Rene Descartes, Blaise Pascal, Gottfried Wilhelm Leibniz). The influence of the XVII century physics revolution on other central figures such as Kant is unquestionable. Early Modern Philosophy sets an intellectual stage for many subsequent developments in the Philosophy of Physics and directly addresses some of the most perplexing issues like the connection (or lack thereof) between physics and religion. The core of the Philosophy requirement involves two courses in Epistemology, Metaphysics and Philosophy of Science. One course in this field would not be sufficient due to its very broad nature. Students are strongly advised to take a relevant History course. This requirement can be substituted by an additional philosophy course to reflect interests of those students who want a deeper background in Epistemology, Metaphysics and Philosophy of Science or have other related interests such as Ancient Natural Philosophy.

In addition to the above philosophy courses, PHIL 0210 (Science, Perception, and Reality) serves as a gateway into the concentration. It may be substituted by other relevant courses such as PHYS 0100 (Flat Earth to Quantum Uncertainty: On the Nature and Meaning of Scientific Explanation).

A course in calculus is a prerequisite for most physics and some philosophy classes.

Required courses for the A.B. degree are listed below:

**Physics Courses**

Select one of the following introductory courses in Modern Physics:

- PHYS 0060 Foundations of Electromagnetism and Modern Physics
- PHYS 0160 Introduction to Relativity and Quantum Physics

One course in Special Relativity and Classical Field Theory:

- PHYS 0470 Electricity and Magnetism

Select one of the following in Methods of Experimental and Theoretical physics:

- PHYS 0500 Advanced Classical Mechanics
- PHYS 0560 Experiments in Modern Physics

Select one of the following in Quantum Mechanics and its applications:

- PHYS 1410 Quantum Mechanics A
- PHYS 1530 Thermodynamics and Statistical Mechanics

One more 1000-level Physics course

**Philosophy Courses**

Select one of the following gateway courses:

- PHIL 0210 Science, Perception and Reality
- PHIL 0100 Critical Reasoning
- PHIL 0060 Modern Science and Human Values
- PHIL 0540 Logic

Select one of the following courses in Early Modern Philosophy:

- PHIL 0360 Early Modern Philosophy
- PHIL 1700 British Empiricists
- PHIL 1710 17th Century Continental Rationalism
- PHIL 1720 Kant: The Critique of Pure Reason

Select two of the following courses in Epistemology, Metaphysics and Philosophy of Science:

- PHIL 1590 Philosophy of Science
- PHIL 1620 Philosophy of Quantum Mechanics
- PHIL 1660 Metaphysics
- PHIL 1670 Time
- PHIL 1750 Epistemology

**History Courses**

Select one of the following courses in History of Science:

- HIST 0522N Reason, Revolution and Reaction in Europe
- HIST 1825M Science at the Crossroads
- HIST 1976I The World of Isaac Newton

**Calculus**

Select one of the following:

- MATH 0180 Intermediate Calculus
- MATH 0200 Intermediate Calculus (Physics/Engineering)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Honors

Seniors wishing to earn honors by presenting a senior honors thesis should consult their concentration advisor during their sixth semester or at the start of the seventh semester concerning procedures and requirements. Students may earn honors by presenting a senior thesis judged to be of honors quality by two readers. In addition to completing the usual nonhonors requirements, the student should also have a grade point average of over 3.4 in physics, philosophy and history of science courses (of which at least five must be taken for a letter grade). Honors theses are usually prepared over a period of two semesters with an advisor from the Department of Physics or the Department of Philosophy.

Political Science

Why do Hindus and Muslims live in harmony in one city and fight bitterly in another just a few miles away? Why is the U.S. the only industrialized nation without a complete national health insurance? What is the legacy of slavery in the U.S.? Why are there so few women in Congress? How is radicalism in the Middle East changing? Why and how does democracy flourish? Just what is democracy? How do emotions shape our political behavior? What do war movies tell us about the USA? Would less government lead to more social justice? What is social justice? How does immigration shape the American Dream? What is the American dream?

Political science is about questions like these. You can grapple with every one of them—nations, regions, cities, communities—live their common lives. How do people (or duck) their common problems. How people govern themselves. They think, talk, argue, fight, and vote. Students passionate about social challenges may also choose to pursue the Engaged Scholars Program, which allows them to connect theory and practice and gain hands-on experience working with community partners.

The undergraduate concentration is organized around three broad tracks, or programs of study: American politics, international and comparative politics, and political theory. Twelve courses are required overall: ten within the Department of Political Science and two from areas outside the department related to your chosen track. Thirteen courses are required if the methods requirement is fulfilled with a course outside the department.

Requirements:

- **Two introductory courses:**
  - For the American politics and political theory tracks, select two courses from the following list. One of which must be the introductory course associated with the chosen track.
  - For the international and comparative politics track, the following two introductory courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Track</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 0010</td>
<td>Introduction to the American Political Process</td>
<td>Political Theory</td>
<td>1</td>
</tr>
<tr>
<td>POLS 0110</td>
<td>Introduction to Political Thought</td>
<td>Political Theory</td>
<td>1</td>
</tr>
<tr>
<td>POLS 0200</td>
<td>Introduction to Comparative Politics</td>
<td>International Politics</td>
<td>1</td>
</tr>
<tr>
<td>POLS 0400</td>
<td>Introduction to International Politics</td>
<td>International Politics</td>
<td>1</td>
</tr>
</tbody>
</table>

- One course in the American politics subfield
- One methods course from Political Science
- One research seminar from the POLS 1820, 1821, 1822, 1823 or 1824 offerings that is track related

- **One course in the political theory subfield**
- **Two courses in the international and comparative politics subfield**
- **Three upper-level courses in the chosen subfield**

- **One methods course from Political Science:**
- One research seminar from the POLS 1820, 1821, 1822, 1823 or 1824 offerings that is track related

- A comparable course from an outside department (APMA 0650, ANTH 1940, CLPS0900, ECON 1620, ECON 1630, EDUC 1100, EDUC 1110, GEOL 1320, PHP1501, SOC 1100 or SOC 1120 may also be used). If the methods requirement is fulfilled by an outside department course, it will not count as one of the 12 required courses.

To obtain an advisor contact the Concentration Coordinator Patti Gardner.

Honors

Students wishing to undertake the honors program need to complete the same requirements as shown for the concentration. Completion of the methods requirement is required prior to applying to the Honors program. Students must also complete an honors research project and take POLS 1910 and POLS 1920 during the senior year. POLS 1910 and POLS 1920 will count as one credit towards the 10 required Political Science courses for the concentration.

Portuguese and Brazilian Studies

Portuguese and Brazilian Studies examines the Portuguese-speaking world, a large and diverse geographical and cultural area spread over five continents. Inhabited by two hundred fifty million people, this area includes Brazil, Continental and Insular Portugal, Lusophone Africa and Luso-America. Although concentrators are encouraged to examine the global nature of the Portuguese-speaking world, typically they focus on one of the specific geographical entities mentioned above. Concentrators will strengthen their Portuguese language skills (Portuguese 400 or the equivalent is a pre-requisite) and explore relevant Lusophone literature, education, history and social science. The concentration offers one program in language and literature and another that is interdisciplinary. Most concentrators study abroad in either Brazil or Portugal.

Requirements

- **POBS 0610** Mapping Portuguese-Speaking Cultures: Brazil
- **POBS 0620** Mapping Portuguese-Speaking Cultures: Portugal and Africa
- **POBS 1030** Portuguese Stylistics: Advanced Language Study and Creative Writing
- **POBS 1800E** The Brazilian Puzzle: Confronting the Post-Colonial Legacy
- **or POBS 1800F** The Lusophone World and the Struggle for Modernity
- Four additional courses from Portuguese and Brazilian Studies and/or related departments, such as History, Africana Studies, Political Science, Anthropology, Sociology, Music, and the Watson Institute. These courses are intended to develop students’ specific interests within the concentration.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Research Methods and Capstone

Another element in the Psychology concentration is a research methods course that builds on the introductory statistics course (which will be a prerequisite) but exposes students to a variety of topics in research of the mind: to empirical methods (e.g., surveys, chronometry, eye tracking, brain imaging), to common designs (e.g., factorial experimental, correlational, longitudinal), to research ethics, and to best practices of literature review. Concentrators will additionally take either a seminar course or an independent research course to serve as their capstone experience.

Additional requirements for Sc.B.

In line with university expectations, the Sc.B. requirements include a greater number of courses and especially science courses. The definition of "science" is flexible. A good number of these courses will be outside of CLPS, but several CLPS courses might fit into a coherent package as well. In addition, the Sc.B. degree also requires a lab course to provide these students with in-depth exposure to research methods in a particular area of the science of the mind.

Honors Requirement

The Research Methods course will serve as a requirement for admission to the Honors program in Cognitive Science, Cognitive Neuroscience, and Psychology. Previously, any lab course served as this requirement. This practice not only demanded a large number of lab courses as part of the CLPS curriculum but also suffered from frequent mismatches between the type of research the student wished to pursue and the type of lab course available in the relevant semesters. A more general research methods course is likely to prepare students better and more broadly than any single lab course can.

FOR DETAILED UPDATES, PLEASE REFER TO THE COGNITIVE, LINGUISTIC, AND PSYCHOLOGICAL SCIENCES (CLPS) UNDERGRADUATE PAGE.

Requirements for the A.B. degree

STANDARD PROGRAM FOR THE A.B. DEGREE

1. One of both of these courses may be replaced by more advanced literature courses conducted in Portuguese.
2. Conducted in Portuguese, the seminar brings the concentrators together for an interdisciplinary consideration of key topics in the Portuguese-speaking world. A research paper written in Portuguese is required.

Senior Project (optional)

In addition to taking a POBS 1800-series concentration seminar, students may choose to complete a senior project attached to any course in Portuguese and Brazilian Studies and related fields, including the Concentration Seminar, the latter possibility to be made at the discretion of the instructor. The advisor of the senior project is the professor of the course from which the project stems. Projects are not limited to papers, and may include short documentaries, a visual arts project, or an oral history project.

Psychology

Psychology encompasses a range of phenomena and levels of analysis in pursuit of three goals: to deepen understanding of cognitive and neural mechanisms of sensation, perception, learning, and emotion; to probe the biological and evolutionary foundations of animal behavior; and to clarify the social perception and assessment of individuals and groups. The concentration offers an array of course options, including study in quantitative methods, laboratory techniques, and senior seminars on specialized topics. Students take upper-level courses in the field’s major sub-disciplines, including perception and cognition, behavioral neuroscience, and social psychology. The concentration in Psychology prepares students for careers in clinical psychology, business, policy-related research positions, law, and education.

The A.B. concentration requires 12 courses. The Sc.B. concentration additionally requires 1 laboratory course and 4 approved science courses, totaling to a total of 17 required courses.

Common Core

The introductory course, “CLPS 0010 Mind, Brain, and Behavior,” surveys the broad territory of the scientific study of the mind, as uniquely represented by our department. The course maps the breadth of the science of the mind, focusing on fascinating questions, garnered insights, common commitments, and successful techniques and approaches. The course can be taken by students interested in the CLPS concentrations or as an introduction at the beginning of one’s college career or as an integration after having completed a number of specialized courses in a particular concentration.

Careers in Psychology and related fields requires familiarity with statistics. Therefore, the Psychology concentration requires a course in Quantitative Methods (CLPS 0900). CLPS 0900 is a prerequisite for most of the laboratory courses, so concentrators should plan to take this course by their fourth semester. The department does not grant concentration credit of AP Statistics, regardless of score. Students who feel that CLPS 0900 is too elementary can complete an approved alternative course (e.g., APMA 1650, CLPS 2906).

Foundation

To provide students with a solid foundation of knowledge in their area of concentration and to minimize redundancy, the Psychology concentration requires four foundation courses in Social/Personality, Perception/Cognition, Development, and Learning/Animal Behavior/Behavioral Neuroscience.

Electives

Each concentrator will take four additional courses that allow the student to go into depth in some of the relevant topics. These electives must include at least two courses in one of the four foundation topics (i.e., Social/Personality, Perception/Cognition, Development, and Learning/Animal Behavior/Behavioral Neuroscience). The courses designed to count as electives will often have foundation courses as prerequisites and may include laboratory courses, content courses, or seminars.

Research Methods and Capstone

Another element in the Psychology concentration is a research methods course that builds on the introductory statistics course (which will be a prerequisite) but exposes students to a variety of topics in research of the mind: to empirical methods (e.g., surveys, chronometry, eye tracking, brain imaging), to common designs (e.g., factorial experimental, correlational, longitudinal), to research ethics, and to best practices of literature review. Concentrators will additionally take either a seminar course or an independent research course to serve as their capstone experience.

Additional requirements for Sc.B.

In line with university expectations, the Sc.B. requirements include a greater number of courses and especially science courses. The definition of "science" is flexible. A good number of these courses will be outside of CLPS, but several CLPS courses might fit into a coherent package as well. In addition, the Sc.B. degree also requires a lab course to provide these students with in-depth exposure to research methods in a particular area of the science of the mind.

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FOR DETAILED UPDATES, PLEASE REFER TO THE COGNITIVE, LINGUISTIC, AND PSYCHOLOGICAL SCIENCES (CLPS) UNDERGRADUATE PAGE.

Requirements for the A.B. degree

STANDARD PROGRAM FOR THE A.B. DEGREE

1. One approved course in Social/Personality, such as:
   CLPS 0700 Social Psychology
   CLPS 0701 Personality
   CLPS 1700 Abnormal Psychology

One approved course in Perception/Cognition: 1

CLPS 0200 Human Cognition
CLPS 0220 Making Decisions
CLPS 0500 Perception and Mind

One approved course in Development, such as: 1

CLPS 0600 Developmental Psychology
CLPS 0610 Children's Thinking: The Nature of Cognitive Development

One approved course in Learning/Animal Behavior/Behavioral Neuroscience, such as:

CLPS 0100 Learning and Conditioning
CLPS 0110 Animal Behavior

Four Approved Electives related to Psychology, such as: 4

BIOL 0480 Evolutionary Biology
CLPS 1100 Animal Cognition
CLPS 1150 Memory and the Brain
CLPS 1200 Thinking
CLPS 1480B Cognitive Aging and Dementia
CLPS 1500 Perception and Action
CLPS 1510 Auditory Perception Laboratory
CLPS 1610 Cognitive Development
CLPS 1650 Child Language Acquisition

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).


Requirements Specific for the Sc.B. degree

STANDARD PROGRAM FOR THE Sc.B. DEGREE

One Independent Study or Approved Seminar, such as: 1
CLPS 1400 The Neural Bases of Cognition
CLPS 1480B Cognitive Aging and Dementia
CLPS 1480C Cognitive Control Functions of the Prefrontal Cortex
CLPS 1470 Mechanisms of Motivated Decision Making
CLPS 1495 Affective Neuroscience
CLPS 1560 Visually-Guided Action and Cognitive Processes
CLPS 1781 Thinking about the Social World
CLPS 1783 Nudge: Social Psychology for Social Change
CLPS 1900 Research Design and Methods 1

Total Credits 12

One approved course in Social/Personality, such as: 1
CLPS 0700 Social Psychology
CLPS 0701 Personality
CLPS 1700 Abnormal Psychology

One approved course in Perception/Cognition, such as: 1
CLPS 0200 Human Cognition
CLPS 0220 Making Decisions
CLPS 0500 Perception and Mind

One approved course in Development, such as: 1
CLPS 0600 Developmental Psychology
CLPS 0610 Children's Thinking: The Nature of Cognitive Development

One approved course in Learning/Animal Behavior/Behavioral Neuroscience, such as: 1
CLPS 0100 Learning and Conditioning
CLPS 0110 Animal Behavior

Four Approved Electives, such as: 4
BIOL 0480 Evolutionary Biology
CLPS 1100 Animal Cognition
CLPS 1150 Memory and the Brain
CLPS 1200 Thinking
CLPS 1480B Cognitive Aging and Dementia
CLPS 1500 Perception and Action
CLPS 1510 Auditory Perception Laboratory
CLPS 1650 Child Language Acquisition
CLPS 1720 Human Resilience
CLPS 1730 Psychology in Business and Economics
CLPS 1820 Language and the Brain
EDUC 1260 Emotion, Cognition, Education
PHIL 1770 Philosophy of Mind

One Independent Study or Approved Seminar, such as: 1
CLPS 1400 The Neural Bases of Cognition
CLPS 1480B Cognitive Aging and Dementia
CLPS 1480C Cognitive Control Functions of the Prefrontal Cortex

CLPS 1470 Mechanisms of Motivated Decision Making
CLPS 1495 Affective Neuroscience
CLPS 1560 Visually-Guided Action and Cognitive Processes
CLPS 1781 Thinking about the Social World
CLPS 1783 Nudge: Social Psychology for Social Change
CLPS 1900 Research Design and Methods 1

One Approved Laboratory Course, such as: 1
CLPS 1180A Canine Behavior
CLPS 1191 Animal Behavior Laboratory
CLPS 1193 Laboratory in Genes and Behavior
CLPS 1290 Laboratory in Cognitive Processes
CLPS 1490 Functional Magnetic Resonance Imaging: Theory and Practice
CLPS 1492 Computational Cognitive Neuroscience
CLPS 1510 Auditory Perception Laboratory
CLPS 1590 Visualizing Vision
CLPS 1690 Laboratory in Developmental Psychology
CLPS 1791 Laboratory in Social Cognition
CLPS 1890 Laboratory in Psycholinguistics

Four Approved Science Courses, such as: 4
BIOL 0200 The Foundation of Living Systems
BIOL 0800 Principles of Physiology
CHEM 0350 Organic Chemistry
CSCI 1430 Computer Vision
CSCI 1950F Introduction to Machine Learning
ENGN 1220 Neuroengineering
MATH 0100 Introductory Calculus, Part II
NEUR 1030 Neural Systems
NEUR 1040 Introduction to Neurogenetics
PHYS 0030 Basic Physics

Total Credits 17

1 For the current list of approved courses in all categories, see the CLPS Psychology page.

Public Health

Public Health is an interdisciplinary concentration through which students examine a variety of issues, including population health and disease, health policy, cross-cultural and international aspects of health, the organizational and social structures through which health services are delivered and received, and the public health system. Courses in the concentration allow students to explore the ways in which the social, political, behavioral and biological sciences contribute to the understanding of patterns of population distributions of health and disease. The concentration also provides students with courses in basic research methods and statistics necessary for problem solving and critical thinking in the emerging emphasis on evidence-based health care and public health.

The undergraduate component to the five-year AB/MPH differs in some ways from the Public Health concentration. Please refer to http://brown.edu/academics/public-health/education-training/masters/mph-program-about-us/combined-programs/abmph. Meet early with a concentration adviser to discuss your plans.

1. Core Courses: (non-substitutable; 4 required for honors, 5 for non-honors)

PHIL 0310 Health Care in the United States 1
This course is best taken as a freshman or sophomore.

PHIL 0320 Introduction to Public Health 1

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
2. Environmental Health and Policy (Select one of the following):

- PHP 1101 World of Food: Personal to Global Perspectives on Nutrition, Agriculture and Policy
- PHP 1700 Current Topics in Environmental Health
- PHP 1710 Climate Change and Human Health
- BIOL 1820 Environmental Health and Disease
- PLCY 1702E Environmental Law and Policy

3. Health, Health Care Systems and Policy (Select one of the following):

- PHP 1070 The Burden of Disease in Developing Countries
- PHP 1100 Comparative Health Care Systems
- PHP 1500 Global Health Nutrition
- PHP 1520 Emergency Medical Systems: An Anatomy of Critical Performance
- PHP 1530 Case Studies in Public Health: The Role of Governments, Communities and Professions
- DEVL 1802S Human Security and Humanitarian Response: Increasing Effectiveness and Accountability
- ECON 1360 Health Economics
- PLCY 1700K Health Policy Challenges

4. Social and Behavioral Science for Prevention (Select one of the following):

- PHP 1010 Doctors and Patients- Clinical Communication in Medicine
- PHP 1400 HIV/AIDS in Africa: A Multidisciplinary Approach to Support HIV/AIDS Care and Treatment Programs
- PHP 1540 Alcohol Use and Misuse
- PHP 1600 Obesity in the 21st Century: Causes, Consequences and Countermeasures
- PHP 1680N Tobacco, Smoking, and the Evil Empire
- PHP 1740 Principles of Health Behavior and Health Promotion Interventions
- PHP 1880 Meditation, Mindfulness and Health
- PHP 1920 Social Determinants of Health
- PHP 2340 Behavioral and Social Science Theory for Health Promotion
- PHP 2365 Public Health Issues in LGBT Populations
- POLS 1740 Politics of Food

5. Approved General Electives (Select four electives; no more than two (2) can be Human Biology/Physiology courses):

The four electives may be selected from: A. the approved courses from the areas listed above or B. the approved general electives listed below. Note that ANY PHP course can be counted as a general elective.

- PHP 0030 Health of Hispaniola
- PHP 0050 Pain and the Human Condition: Exploring the Science, Medicine, and Culture of Pain
- PHP 1680I Pathology to Power: Disability, Health and Community
- PHP 1680K Introduction to Conducting Clinical Research
- PHP 1680M The Epidemiology of Violence and its Consequences
- AFGI 1060W Policy, Culture and Discourse that Shape Health and Access to Healthcare
- AMST 1601 Health and Healing in American History
- ANTH 0300 Culture and Health
- ANTH 1020 AIDS in Global Perspective
- ANTH 1242 Bioethics and Culture
- ANTH 1300 Anthropology of Addictions and Recovery
- ANTH 1310 International Health: Anthropological Perspectives
- BIOL 0030 Principles of Nutrition (Human Biology/Physiology course)
- BIOL 0040 Nutrition for Fitness and Physical Activity
- BIOL 0140K Conservation Medicine
- BIOL 0180 The Biology of AIDS
- BIOL 0190E Botanical Roots of Modern Medicine
- BIOL 0200 The Foundation of Living Systems (Human Biology/Physiology course)
- BIOL 0470 Genetics (Human Biology/Physiology course)
- BIOL 0530 Principles of Immunology (Human Biology/Physiology course)
- BIOL 0600 Principles of Physiology (Human Biology/Physiology course)
- BIOL 0860 Diet and Chronic Disease
- BIOL 0920A Controversies in Medicine (Human Biology/Physiology course)
- BIOL 1920B Health Inequality in Historical Perspective
- BIOL 1920C Social Contexts of Disease
- BIOL 1920D Race, Difference and Biomedical Research: Historical Considerations
- CLPS 1783 Nudge: How to Use Social Psychology to Create Social Change
- ENVS 0490 Environmental Science in a Changing World
- ENVS 1580 Environmental Stewardship and Resilience in Urban Systems
- ETHN 1890J Native American Environmental Health Movements
- HMAN 1970G International Perspectives on NGOs, Public Health, and Health Care Inequalities
- NEUR 0010 The Brain: An Introduction to Neuroscience (Human Biology/Physiology course)
- PLCY 1700V Nonprofit Organizations
- PLCY 1802 Engaged Research Engaged Publics
- SOC 0300B Environment and Society
- SOC 0300E HIV/AIDS: Politics, Culture and Society
- SOC 0300F Unequal From Birth: Child Health From a Social Perspective
- SOC 0300K Inequalities and Health

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Undergraduate Concentrations

**SOC 1250**  
Perceptions of Mental Illness

**SOC 1315**  
Macro-Organizational Theory: Organizations in Social Context

**SOC 1410**  
Aging and the Quality of Life

**SOC 1540**  
Human Needs and Social Services

**SOC 1550**  
Sociology of Medicine

**SOC 1870D**  
Aging and Social Policy

**SOC 1871H**  
Social Perspectives on HIV/AIDS

**SOC 1871N**  
Military Health: The Quest for Healthy Violence

**Total Credits:** 12

### Honors:

An Honors track is available for students who qualify. Honors track students are also required to enroll in PHP 1980 in both semesters of their senior year to conduct research and write the honors thesis. Please visit [http://www.brown.edu/academics/public-health/concentration/honors-track](http://www.brown.edu/academics/public-health/concentration/honors-track) for details or email Barbara Dailey (Barbara_Dailey@brown.edu) for more information.

#### Study Abroad/Study Away

Up to four courses taken elsewhere (study abroad or other transfer) may be applied to non-core courses (up to two per semester abroad). Meet with a concentration adviser to discuss; provide a syllabus for each course to be considered for transfer to your concentration plan.

### Public Policy

Housed in the Watson Institute for International and Public Affairs, the public policy concentration is dedicated to the study of health care and social welfare policy, education policy, urban policy, law and criminal justice, and media and technology. Public policy refers to societal initiatives to remedy social problems. Because social problems typically emerge from complex, multi-faceted social conditions, the study of public policy requires students to become familiar with the insights of diverse academic disciplines into how institutions facilitate or inhibit societal problem-solving. The study of public policy is an excellent framework for integrating ideas drawn from several disciplines around issues of real world significance. Concentrators with a particular interest in such applications should consider the Engaged Scholars Program (http://watson.brown.edu/public-policy/node/391). All concentrators emerge with a sound understanding of institutional change and are well-equipped to contribute to processes of social change.

### Required Courses:

#### Core Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLCY 0100</td>
<td>Introduction to Public Policy</td>
<td>1</td>
</tr>
<tr>
<td>PLCY 1050</td>
<td>Ethics and Public Policy</td>
<td>1</td>
</tr>
<tr>
<td>PLCY 1700T</td>
<td>Good Government</td>
<td></td>
</tr>
<tr>
<td>ECON 1110</td>
<td>Intermediate Microeconomics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1130</td>
<td>Intermediate Microeconomics (Mathematical)</td>
<td></td>
</tr>
<tr>
<td>EDUC 1130</td>
<td>Economics of Education I</td>
<td></td>
</tr>
<tr>
<td>Econometics for Public Policy</td>
<td></td>
<td></td>
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<tr>
<td>PLS 1600</td>
<td>Political Research Methods</td>
<td></td>
</tr>
<tr>
<td>EDUC 1100</td>
<td>Introduction to Qualitative Research Methods</td>
<td></td>
</tr>
<tr>
<td>ECON 1620</td>
<td>Introduction to Econometrics</td>
<td></td>
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<tr>
<td>ECON 1630</td>
<td>Econometrics I</td>
<td></td>
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<tr>
<td>SOC 1100</td>
<td>Introductory Statistics for Social Research</td>
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<tr>
<td>Policy Analysis and Program Evaluation</td>
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<tr>
<td>PLCY 1200</td>
<td>Policy Analysis and Program Evaluation</td>
<td></td>
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<tr>
<td>or EDUC 1160</td>
<td>Evaluating the Impact of Social Programs</td>
<td></td>
</tr>
</tbody>
</table>

### Elective Courses:

<table>
<thead>
<tr>
<th>Electives</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Three Broad Elective Courses: May be taken in any policy area</td>
<td>3</td>
</tr>
<tr>
<td>2. Two more electives in one of the areas you have already studied</td>
<td>2</td>
</tr>
<tr>
<td>Sample electives may include the following:</td>
<td></td>
</tr>
<tr>
<td><strong>Health Policy</strong></td>
<td></td>
</tr>
<tr>
<td>PLCY 1700K</td>
<td>Health Policy Challenges</td>
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<tr>
<td><strong>Technology Policy</strong></td>
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<tr>
<td>CSCI 1800</td>
<td>Cybersecurity and International Relations</td>
</tr>
<tr>
<td>PLCY 1700J</td>
<td>GIS and Public Policy</td>
</tr>
<tr>
<td>POLS 1822X</td>
<td>Technology and International Politics</td>
</tr>
<tr>
<td>SCSC 1700C</td>
<td>Science and Technology Policy in the Global South</td>
</tr>
<tr>
<td><strong>Environmental Policy</strong></td>
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</tr>
<tr>
<td>ENVS 1350</td>
<td>Environmental Economics and Policy</td>
</tr>
<tr>
<td>ENVS 1410</td>
<td>Environmental Law and Policy</td>
</tr>
<tr>
<td>ENVS 1530</td>
<td>From Locke to Deep Ecology: Property Rights and Environmental Policy</td>
</tr>
<tr>
<td>ENVS 1555</td>
<td>Urban Agriculture: The Importance of Localized Food Systems</td>
</tr>
<tr>
<td><strong>Governance, Law, and Ethics</strong></td>
<td></td>
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<tr>
<td>PHP 1700</td>
<td>Current Topics in Environmental Health</td>
</tr>
<tr>
<td><strong>Social Policy</strong></td>
<td></td>
</tr>
<tr>
<td>PLCY 1700Z</td>
<td>State and Local Government</td>
</tr>
<tr>
<td>PLCY 1701H</td>
<td>Congressional Leadership, Parties and Public Policy</td>
</tr>
<tr>
<td>POLS 0220</td>
<td>City Politics</td>
</tr>
<tr>
<td>POLS 1010</td>
<td>Topics in American Constitutional Law</td>
</tr>
<tr>
<td><strong>Urban Policy</strong></td>
<td></td>
</tr>
<tr>
<td>PLCY 1700B</td>
<td>Social Welfare Policy in the United States</td>
</tr>
<tr>
<td>PLCY 1700R</td>
<td>Urban Revitalization: Lessons from the Providence Plan</td>
</tr>
<tr>
<td>PLCY 1701M</td>
<td>Juvenile Justice Institutions and Policy</td>
</tr>
<tr>
<td>PLCY 1700D</td>
<td>Urban Policy</td>
</tr>
<tr>
<td>PLCY 1701D</td>
<td>Localized Food Systems</td>
</tr>
<tr>
<td>PLCY 1700H</td>
<td>Rights and Environmental Policy</td>
</tr>
<tr>
<td><strong>Senior Capstone</strong></td>
<td></td>
</tr>
<tr>
<td>PHP 1700</td>
<td>Urbanization in China</td>
</tr>
<tr>
<td>PLCY 1700Q</td>
<td>Urban Policy Challenges</td>
</tr>
<tr>
<td>PLCY 1700R</td>
<td>Urban Revitalization: Lessons from the Providence Plan</td>
</tr>
<tr>
<td>SOC 1600</td>
<td>Comparative Development</td>
</tr>
<tr>
<td>URBN 1870F</td>
<td>Housing and Homelessness</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit [Courses@Brown.edu](https://cab.brown.edu).
Honors

Candidates for honors should apply in the Spring term of their third year. Successful candidates will enroll in the Public Policy Colloquium and prepare a senior honors paper.

Religious Studies

Religious Studies explores religious thought and practice in various historical, political, cultural, and social contexts in order to understand and interpret societies and cultures throughout the world. It fosters scholarly skills such as close reading (of texts, images, artifacts, and other social data), excellence in writing and verbal expression, interpretation of the past and present from multiple forms of evidence, and assessment of contemporary social issues. By exploring the public and private concerns that the study of religion highlights -- for example, the creation of community, the nature of the individual, suffering and death, notions of good and evil -- students discover new ways of engaging the complex world in which they live. As students examine religious activity in the Americas, South and East Asia, the Middle East and West Asia, Africa, and Europe, they not only learn about the formation and transmission of beliefs, behaviors, values, rituals, and identities but also come to understand how diverse peoples have expressed religious understandings of themselves and others through politics, institutions, conflicts, and spaces commonly recognized as secular.

1. Basic Requirement

A concentration in Religious Studies includes a minimum of nine semester-long courses. Those nine courses include RELS 1000 (a seminar in methods in the study of religion) and eight other courses, which must satisfy the concentration's distribution requirements. Students who transfer to Brown or study abroad must complete at least five courses in Religious Studies at Brown.

2. Distribution of Introductory, Intermediate, and Advanced courses:

Among the eight concentration courses, no more than four courses (out of nine) can be at the introductory level (0001-0199). In addition to any introductory courses and RELS 1000, the plan of study must include at least two intermediate-level courses (0200-0999) and two advanced-level courses (above 1000).

3. Geographic and Methodological Distribution:

In order to ensure that students study a diversity of religious traditions and learn about multiple methods of study, the eight concentration courses (that is, the courses other than RELS 1000) must: 1) reflect more than one approach to the study of religion (e.g., philosophical, anthropological, historical); and 2) examine more than one religious tradition. To ensure that students examine multiple traditions, the plan of study ordinarily should include two or more courses in each of these areas: A) Traditions that emerge from the Mediterranean world and West Asia/Islamic World (e.g., Judaism, Christianity, Islam); and B) Traditions that emerge from South and East Asia (e.g., Buddhism, Hinduism, Daoism).

### A. Traditions that emerge from the Mediterranean world and West Asia/Islamic World (e.g., Judaism, Christianity, Islam)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELS 0015</td>
<td>Sacred Stories</td>
</tr>
<tr>
<td>RELS 0025</td>
<td>Wealth: Religious Approaches</td>
</tr>
<tr>
<td>RELS 0035</td>
<td>The Bible and Moral Debate (JUDS 0060)</td>
</tr>
<tr>
<td>RELS 0052</td>
<td>Love and Reason</td>
</tr>
<tr>
<td>RELS 0055</td>
<td>Modern Problems of Belief</td>
</tr>
<tr>
<td>RELS 0056</td>
<td>Spiritual But Not Religious: Making Spirituality in America</td>
</tr>
<tr>
<td>RELS 0065</td>
<td>On Being Human: Religious and Philosophical Conceptions of Self</td>
</tr>
<tr>
<td>RELS 0068</td>
<td>Religion and Torture</td>
</tr>
<tr>
<td>RELS 0090J</td>
<td>Death and Afterlife in the Biblical Tradition</td>
</tr>
</tbody>
</table>

### B. Traditions that emerge from South and East Asia (e.g., Buddhism, Hinduism, Daoism)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELS 0090K</td>
<td>Christmas in America</td>
</tr>
<tr>
<td>RELS 0260</td>
<td>Religion Gone Wild: Spirituality and the Environment</td>
</tr>
<tr>
<td>RELS 0290D</td>
<td>Islamic Sexualities</td>
</tr>
<tr>
<td>RELS 0322</td>
<td>Great Jewish Books (JUDS 0681)</td>
</tr>
<tr>
<td>RELS 0325</td>
<td>How the Bible Became Holy</td>
</tr>
<tr>
<td>RELS 0405</td>
<td>Jesus and the Gospels</td>
</tr>
<tr>
<td>RELS 0410</td>
<td>Christianity in Late Antiquity</td>
</tr>
<tr>
<td>RELS 0600B</td>
<td>Islam in America</td>
</tr>
<tr>
<td>RELS 0600C</td>
<td>Radical Islam: Significant Moments in Contemporary Media</td>
</tr>
<tr>
<td>RELS 0810</td>
<td>Conservatives vs. Liberals: Religion and Identity in America</td>
</tr>
<tr>
<td>RELS 0820</td>
<td>African American Religious Strategies: Martin and Malcolm</td>
</tr>
<tr>
<td>RELS 0830</td>
<td>Religion, Reason, and Ethics from Kant to Nietzsche</td>
</tr>
<tr>
<td>RELS 0842</td>
<td>A Game of Thrones: Religion and Nationalism, 1789-1933 (JUDS 0700)</td>
</tr>
<tr>
<td>RELS 0845</td>
<td>Religious Freedom in America</td>
</tr>
<tr>
<td>RELS 0880E</td>
<td>War and Peace in the Hebrew Bible and its Environment (JUDS 0670)</td>
</tr>
<tr>
<td>RELS 0880F</td>
<td>Sex and Gender in Ancient Israel (JUDS 0671)</td>
</tr>
<tr>
<td>RELS 1000</td>
<td>Methods in Religious Studies</td>
</tr>
<tr>
<td>RELS 1050A</td>
<td>Problems in Israeliite Religion and Ancient Judaism (JUDS 1625)</td>
</tr>
<tr>
<td>RELS 1110</td>
<td>Mishnah and Tosefta (JUDS 1602)</td>
</tr>
<tr>
<td>RELS 1170B</td>
<td>The Talmud (JUDS 1630)</td>
</tr>
<tr>
<td>RELS 1211</td>
<td>Lords of Middle Sea: Greek and Biblical Myth and Society</td>
</tr>
<tr>
<td>RELS 1300</td>
<td>Ancient Christianity and the Sensing Body</td>
</tr>
<tr>
<td>RELS 1325B</td>
<td>Early Christian Asceticism: Rhetorics of Practice</td>
</tr>
<tr>
<td>RELS 1370B</td>
<td>Philosophy of Mysticism</td>
</tr>
<tr>
<td>RELS 1380A</td>
<td>Money, Media, and Religion</td>
</tr>
<tr>
<td>RELS 1380B</td>
<td>Ethics of Vulnerability</td>
</tr>
<tr>
<td>RELS 1385</td>
<td>Religion and Postmodernism</td>
</tr>
<tr>
<td>RELS 1530D</td>
<td>Islamic Sectarianism</td>
</tr>
<tr>
<td>RELS 1600B</td>
<td>Prophets and Priests in Exile: Biblical Literature of the 6th Century BCE (JUDS 1690)</td>
</tr>
<tr>
<td>RELS 1830A</td>
<td>Pragmatism, Religion, and Politics</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
4. Courses in Other Departments

Courses listed in other departments but taught by Religious Studies faculty count toward the program of study. In addition to cross-listed courses taught by Religious Studies faculty, up to three courses taught by faculty in other departments can count toward the program (pending approval by the DUS). Students who transfer to Brown, study abroad, or otherwise petition to include Brown courses not cross-listed with Religious Studies must complete at least five courses in Religious Studies at Brown.

5. Capstone Project

No later than the end of spring registration in the junior year, the concentrator will determine how they will complete a senior capstone project for this requirement - either by selecting a capstone course, or by undertaking an honors thesis. A capstone course will be selected in consultation with the concentration advisor and other faculty as appropriate. Within the frame of this capstone course and through work completed for the course, the concentrator will address the theoretical and interpretive issues of their particular focus in the Religious Studies concentration.

Honors Thesis (Optional)

A thesis is an opportunity for students to conduct extended independent research under the guidance of faculty. If a student chooses to write an honors thesis, in addition to completing the typical eight concentration courses (in addition to RELS 1000) the student will enroll in RELS 1999 during both semesters of the senior year. Whether or not a student receives honors, RELS 1999 will serve as the student’s capstone course. To be eligible to write a thesis, a student must have earned a grade point average of greater than 3.5 (A=4, B=3, C=2) on courses that count toward the concentration. Additionally, to be eligible for honors, concentrators may take no more than two of the concentration courses with the “S/NC” option, after declaring a Religious Studies concentration. (Note: if a student is philosophically committed to taking the majority of her or his courses at Brown as “S/NC,” that student may petition the Department to waive this “S/NC” limit.) Writing the thesis is a necessary, but not sufficient, condition for receiving Honors. In order to receive Honors, the student’s thesis must earn an A from its two readers, and the student must have earned a grade point average of greater than 3.5 in the concentration and satisfied all other concentration requirements.

Paul Nahme, Director of Undergraduate Studies
Tina Creamer, Departmental Administrator

Renaissance and Early Modern Studies

The Program in Renaissance and Early Modern Studies (REMS) encourages students to pursue interdisciplinary and multidisciplinary approaches to the study of Europe and its relation with the Americas and Asia in the early modern period. Students focus on the late fourteenth through the late eighteenth centuries—a time marked by scientific and agricultural revolutions, the Reformation, the development of capitalism, and the rise of cultural forms such as the novel, opera, Grub Street journalism and the art market. Concentrators examine the development of new cultural and political forms through the imitation and reworking of those of classical antiquity, the restructuring of patriarchal society, and the emergence of the sovereign nation state. Students take courses in more than a dozen departments affiliated with REMS.

Sponsoring departments include: Africana Studies, Archaeology and the Ancient World, Classics, Comparative Literature, English, French Studies, Hispanic Studies, History, History of Art and Architecture, History of Mathematics, Italian Studies, Judaic Studies, Music, Philosophy, Portuguese and Brazilian Studies, Slavic Languages, and Theatre Arts and Performance Studies. Students are invited to take advantage of this breadth of offerings in order to enhance their understanding of the period, as well as to gain a sense of the uses, limitations, and interrelationships of particular disciplinary approaches.

Requirements

Concentrators are required to take a minimum of 8 courses. These include the following:

1. Three courses on Renaissance and/or early modern topics in one field in which the student has primary interest or training, (for example, literature, history of art and architecture, or history).
2. Three courses related to the Renaissance and/or early modern period chosen from two other fields.
3. A senior project. (Credit will be granted through registration for Independent Study in the department in which the topic of research lies.)
4. Another relevant course of the student’s choosing.

In addition, the student must be able to demonstrate a reading knowledge of a relevant modern or ancient language other than English. This language requirement does not count as one of the 8 courses.

Under the supervision of the director of the program, students may choose courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLT 0710I</td>
<td>New Worlds: Reading Spaces and Places in Colonial Latin America</td>
</tr>
<tr>
<td>ENGL 1410P</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>ENGL 0100C</td>
<td>Altered States</td>
</tr>
<tr>
<td>ENGL 0150D</td>
<td>Shakespeare’s Present Tense</td>
</tr>
<tr>
<td>ENGL 0201H</td>
<td>Green Shakespeare: Literature, Ecology, and the Nonhuman</td>
</tr>
<tr>
<td>ENGL 0310A</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>ENGL 0310E</td>
<td>Shakespeare: The Screenplays</td>
</tr>
<tr>
<td>ENGL 1310A</td>
<td>Firing the Canon: Early Modern Women’s Writing</td>
</tr>
<tr>
<td>ENGL 1310H</td>
<td>The Origins of American Literature</td>
</tr>
<tr>
<td>ENGL 1310J</td>
<td>Imagining the Individual in Renaissance England</td>
</tr>
<tr>
<td>ENGL 1360K</td>
<td>Shakespeare and Company</td>
</tr>
<tr>
<td>ENGL 1310O</td>
<td>Restoration and Early Eighteenth-Century Literature</td>
</tr>
<tr>
<td>ENGL 1360P</td>
<td>Shakespearean Tragedy</td>
</tr>
<tr>
<td>ENGL 1360S</td>
<td>Between Gods and Beasts: The Renaissance Ovid</td>
</tr>
<tr>
<td>ENGL 1360Z</td>
<td>Shakespeare and Embodiment</td>
</tr>
<tr>
<td>ENGL 1950A</td>
<td>Form and Feeling in Renaissance Poetry</td>
</tr>
<tr>
<td>ENGL 2360O</td>
<td>Irony and Satire</td>
</tr>
<tr>
<td>ENGL 2360P</td>
<td>Thinking with Romance in the Renaissance</td>
</tr>
<tr>
<td>ENGL 2360S</td>
<td>Alternative Miltons</td>
</tr>
<tr>
<td>FREN 0720A</td>
<td>De l’Amour courtois au désir postmoderne</td>
</tr>
<tr>
<td>FREN 2130E</td>
<td>Corps et esprits libertins</td>
</tr>
<tr>
<td>FREN 2130F</td>
<td>Façons d’aïmer: Discourses of Sexuality in Early Modern France</td>
</tr>
<tr>
<td>HIAA 0062</td>
<td>The Age of Rubens and Rembrandt: Visual Culture of the Netherlands in the Seventeenth Century</td>
</tr>
<tr>
<td>HIAA 0550</td>
<td>Gold, Wool and Stone: Painters and Bankers in Renaissance Tuscany</td>
</tr>
<tr>
<td>HIAA 0560</td>
<td>Popes and Pilgrims in Renaissance Rome</td>
</tr>
<tr>
<td>HIAA 0630</td>
<td>Cultural History of the Netherlands in a Golden Age and a Global Age</td>
</tr>
<tr>
<td>HIAA 1560A</td>
<td>Italy and the Mediterranean</td>
</tr>
<tr>
<td>HIAA 1600I</td>
<td>Collections and Visual Knowledge in Early Modern Europe: 1400-1800</td>
</tr>
<tr>
<td>HISP 2160G</td>
<td>Don Quixote: Contexts and Constructions</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Honors

Interested and eligible students will petition to write a thesis and the faculty will choose the Honors group for that year from the applications, making every effort to accommodate all eligible proposals. Selection is based upon the quality of the application, the preparedness of the student to undertake the project, and the availability of appropriate advisors for the subject. Applications will be due to the Director of REMS in mid-April of the student's junior year.

For those accepted, the Honors program will be administered as follows:

Students will sign up for REMS 1980 in the Fall and again in the Spring, with the section number of their advisor. Students must meet regularly with their advisors and second readers throughout the year according to a schedule determined by each student and advisor. Finished drafts of the thesis (which will be about 35 pages in length, not counting bibliography and visual or other supporting materials) will be due to the advisor and second reader on April 1 of the Spring semester. Comments will be returned to the students for final polishing and corrections at that point. Students will receive Honors when both their primary advisor and their second reader have provided written statements in support of the finished project. The finished paper, which should be a polished and revised, edited, professional work of original research, will be made available to the entire REMS faculty at the Annmary Brown Memorial, with a folder for leaving constructive comments on the finished thesis for the concentrator.

This is an optional engagement that we hope will become part of the culture of the program. There will be a public presentation of the Honors work at the end of the Spring semester.

Students planning a December graduation will not be eligible for the Honors Thesis program, although as always they are welcome to work out other ways to pursue projects of independent interest in consultation with an academic advisor.

Students wishing to write an honors thesis must have an A average in the concentration, which means that they will not have received more than one “B” or “S” in any course used for the concentration. Classes taken S/NC may be considered as qualifying the student for Honors if they are marked “S with distinction,” meaning that had the student taken the course for a grade, the grade would have been an “A.” It is advisable for them to have taken at least one class with the person who will advise the thesis, and have already written a research paper before choosing to undertake this year-long writing project. Honors students are strongly encouraged not to take more than 4 classes either semester of their senior year—the Honors class being considered one of the four classes.

Application process:

Each application shall consist of:

1. A very brief (one or two paragraph) cover letter identifying the most appropriate advisor and second readers, and stating also the student’s preparation is for the project. Second readers may be professors who work in areas related to the topic, or in some very special cases (and with advisor’s approval) may be practitioners with whom the student already worked closely, for example.

2. A 2 page double-spaced abstract stating and explaining the topic (subject and argument) of the research to be undertaken, written as clearly as possible.

3. A one-page working bibliography of the most relevant books and major articles to be consulted for the project.

4. A current résumé,

5. A printout of the most recent transcript

The senior project constitutes the capstone for all concentrators. Examples of possible senior projects are: a senior thesis (roughly equivalent to a senior seminar paper), the staging of an early modern play, the performance of early modern music, or an exhibition. The final project will be developed in consultation with two REMS faculty advisors who work closely with the student. Credit is granted through registration for Independent Study in the department for which the topic of research lies.

Liberal Learning

This concentration will help develop your aesthetic awareness, close reading skills, collaborative skills, cultural understanding, facility with symbolic languages, historical awareness, and your speaking and writing.

Science and Society

Science and Society is an interdisciplinary concentration that examines the processes of scientific discovery and the establishment of scientific policies and systems of belief from historical, philosophical, anthropological, and sociological perspectives. Concentrators analyze the practices, norms, and values that reflect and shape our deepest convictions about what is considered “science.” Students select courses in the physical sciences, life sciences, or mathematics and choose a thematic track that may include the history and philosophy of science, gender and science, race, science and ethnicity, health and medicine, environment and society, or they may create their own independent focus. Science and Society prepares students to follow, guide, and shape scientific knowledge as it travels from the laboratory into the public arena.

Requirements

Consisting of 12 courses, the program of study outlined below will be developed by each student in consultation with the concentration advisor. Where appropriate, independent reading, lab courses or GISPS may count for up to three of the twelve total courses. Students will take a minimum of 7 intermediate to advanced courses.

Required Courses (2)

The concentration has two required courses.

- SCSO 1000: Gender, Science and Society, or equivalent introductory course; usually taken in the second or third year.
- SCSO 1900: Senior Seminar, also open to non-majors with the proper background, usually taken senior year.

Thematic Track (3)

Students will organize their course of study around the choice of a thematic track. The theme may be thought of as the applied content portion of the concentration. Students will take a minimum of three courses, at least one of which must be at an advanced level, in one of the thematic areas listed below:

- History & Philosophy of Science
- Gender & Science
- Race, Science & Ethnicity
- Health & Medicine
- Representing Science in Literature & Culture
- Policy, Persuasion & the Rhetoric of Science
- Environment & Society
- Independent Focus

Science Track (4)

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Students will take a minimum of four courses in one of the following scientific areas: physical sciences, life sciences, mathematics/computer science. The chosen area should provide appropriate background and support for the chosen concentration theme. The science courses will be sequenced such that a concentrator will move enough beyond the introductory level to gain some understanding of the world view of scientists within a chosen field. The particular sequence of courses which best meets the science requirement will be chosen in consultation with the concentration advisor. When necessary, the concentration advisor will seek guidance from faculty within the chosen scientific field.

Science and Technology Studies Theory (3)

Students will take three Science and Technology Studies-related courses in the social sciences and humanities. These courses, which will provide critical theoretical background for the study of Science and Society, should address questions of historiography, epistemology and methodology in the field of science and technology studies. A full list of such courses and sample concentrations may be found at https://www.brown.edu/academics/science-and-technology-studies/

Honors

To qualify for Honors a student must:
1. Apply for candidacy for Honors by the end of the student’s seventh semester.
2. Maintain a high level of excellence in courses within the concentration and above average performance in non-concentration courses. In the event that a student has taken a number of courses S/NC he or she will submit CPR’s for consideration by the concentration advisory committee, which will evaluate the student’s candidacy.
3. Complete an Honors Thesis judged by the advisor and an additional reader to be of superior quality.
4. Deliver an oral presentation based on thesis work that is favorably reviewed by the concentration faculty and the advisory committee.

Slavic Studies

Slavic Studies is concerned with the languages, literatures, and civilizations of the Slavic world. Built on sound knowledge of one or two Slavic languages (normally Russian or Czech) the program allows students to develop an in-depth appreciation and understanding of East European cultures and civilizations through a broad spectrum of interdisciplinary fields. Students take courses in literature, history, culture, theater, political science, economics, and international relations. Concentrators focusing on Russia learn one of the world’s most commonly spoken languages and study some of the world’s best-regarded authors and composers: Tolstoy and Dostoevsky, Gogol and Bulgakov, Tchaikovsky and Mussorgsky, and Rachmaninoff and Stravinsky. Focusing on Czech allows students to explore, for example, how Czechs distinguished themselves by peacefully transitioning from communism to capitalism (the “Velvet Revolution”) and separating peacefully with the Slovak Republic (the “Velvet Divorce”). Most concentrators study abroad in a Slavic country, either during the academic year or the summer.

Requirements for the AB Degree

Six semesters of one Slavic language or the equivalent (normally Czech or Russian), or a combined total of eight semesters of two Slavic languages or the equivalent.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>RUSS 0100</td>
<td>Introductory Russian</td>
</tr>
<tr>
<td>&amp; RUSS 0200</td>
<td>and Introductory Russian</td>
</tr>
<tr>
<td>or RUSS 0110</td>
<td>Intensive Russian</td>
</tr>
<tr>
<td>RUSS 0300</td>
<td>Intermediate Russian</td>
</tr>
<tr>
<td>RUSS 0400</td>
<td>Intermediate Russian</td>
</tr>
<tr>
<td>RUSS 0500</td>
<td>Advanced Russian</td>
</tr>
<tr>
<td>RUSS 0600</td>
<td>Advanced Russian</td>
</tr>
</tbody>
</table>

Summer courses offered on the Brown in Petersburg Program can enable advanced placement in academic year courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSS 0250</td>
<td>Introductory Russian in St. Petersburg</td>
</tr>
<tr>
<td>RUSS 0350</td>
<td>Intermediate Russian in St. Petersburg</td>
</tr>
<tr>
<td>RUSS 0550</td>
<td>Advanced Russian in St. Petersburg</td>
</tr>
</tbody>
</table>

In cases where a student’s interests and course of study warrant it, and only upon consulting the concentration advisor, the student may apply more than one Slavic language to the concentration (Czech or Polish in addition to Russian), and would then need a combined total of eight semesters of two Slavic languages:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CZCH 0100  &amp; CZCH 0200</td>
<td>Introductory Czech and Introductory Czech</td>
</tr>
<tr>
<td>CZCH 0410A</td>
<td>Boys and Girls: Relationships under Socialist Bohemia</td>
</tr>
<tr>
<td>CZCH 0410B</td>
<td>Coming of Age in Postwar Czechoslovakia</td>
</tr>
<tr>
<td>CZCH 0410C</td>
<td>Czech View of Self and Others</td>
</tr>
<tr>
<td>CZCH 0410D</td>
<td>Czechs and the Big Brother: Czech Lands in the 1980s</td>
</tr>
<tr>
<td>CZCH 0610A</td>
<td>Czech Lands under Occupation and Terror</td>
</tr>
<tr>
<td>CZCH 0610B</td>
<td>Psychosis of Occupation in the Czech Lands</td>
</tr>
<tr>
<td>CZCH 0610C</td>
<td>Czech Cultural Icons, Emblems, and National Identity</td>
</tr>
<tr>
<td>PLSH 0100 &amp; PLSH 0200</td>
<td>Introductory Polish and Introductory Polish</td>
</tr>
<tr>
<td>PLSH 0300 &amp; PLSH 0400</td>
<td>Intermediate Polish and Intermediate Polish</td>
</tr>
</tbody>
</table>

The concentration in Slavic Studies requires students to complete a minimum of seven 1000-level courses devoted to the study of the East European civilizations: literature, history, culture, theater, political science, economics, international relations. Typically, at least four of these courses will be from within the Department of Slavic Studies. Students’ choice of courses is subject to the approval of the concentration advisor.

Courses in the Department of Slavic Studies:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSS 1110</td>
<td>Special Topics in Russian Studies I: Advanced Reading and Conversation</td>
</tr>
<tr>
<td>RUSS 1200</td>
<td>Russian Fantasy and Science Fiction</td>
</tr>
<tr>
<td>RUSS 1250</td>
<td>Russian Cinema</td>
</tr>
<tr>
<td>RUSS 1290</td>
<td>Russian Literature in Translation I: Pushkin to Dostoevsky</td>
</tr>
<tr>
<td>RUSS 1300</td>
<td>Russian Literature in Translation II: Tolstoy to Solzhenitsyn</td>
</tr>
<tr>
<td>RUSS 1320</td>
<td>Soviet Literature from 1917 to 1953</td>
</tr>
<tr>
<td>RUSS 1330</td>
<td>Soviet and Post-Soviet Literature: Propaganda, Dissidence, Underground</td>
</tr>
<tr>
<td>RUSS 1340</td>
<td>The Russian Novel</td>
</tr>
<tr>
<td>RUSS 1350</td>
<td>Putin, Russia and the New Conflict with the West: Reading Modern Russian Culture</td>
</tr>
<tr>
<td>RUSS 1450</td>
<td>Love, Adultery, and Sexuality</td>
</tr>
<tr>
<td>RUSS 1500</td>
<td>Approaches to Russian Literature</td>
</tr>
<tr>
<td>RUSS 1600</td>
<td>Literature and History: Russian Historical Imagination in the European Context</td>
</tr>
<tr>
<td>RUSS 1800</td>
<td>Pushkin</td>
</tr>
<tr>
<td>RUSS 1810</td>
<td>Tolstoy</td>
</tr>
<tr>
<td>RUSS 1820</td>
<td>Dostoevsky</td>
</tr>
<tr>
<td>RUSS 1840</td>
<td>Nabokov</td>
</tr>
<tr>
<td>RUSS 1860</td>
<td>Chekhov</td>
</tr>
<tr>
<td>RUSS 1900</td>
<td>Russian Jewish Literature and Film</td>
</tr>
<tr>
<td>SLAV 1300</td>
<td>Sociolinguistics (with Case Studies on the Former USSR and Eastern Europe)</td>
</tr>
<tr>
<td>SLAV 1790</td>
<td>Ukraine and the Idea of Central Europe in Literature</td>
</tr>
</tbody>
</table>

Sample courses in other departments:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1268C</td>
<td>The Collapse of Socialism and the Rise of New Russia</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
### Honors

Honors candidacy in Slavic studies assumes an excellent academic record, particularly in the concentration. Additional requirements are the same as those for a standard concentration, plus the writing of a senior thesis (SLAV 1990). For procedures and schedule for writing a senior thesis, please refer to the department guidelines.

### Social Analysis and Research

The Sc.B. concentration in Social Analysis and Research provides both a conceptual and a working knowledge of the techniques for data collection and analysis used for social research in academic and non-academic environments. The centerpiece of the concentration is a rigorous and comprehensive collection of courses: (1) that develop an understanding of the principles underlying the processes of data collection and analysis; and (2) that train students in the application of advanced statistical techniques for data description and analysis. The concepts and skills learned in these courses are reinforced through engagement in applied research with Sociology faculty and/or internships with local organizations in the for-profit and not-for-profit sectors.

Concentrators also take courses that provide grounding in the theoretical approaches to social phenomena that are foundational to social research. Graduates develop an understanding of the concepts and processes that underlie the issues studied by sociologists and the analytic techniques that allow sociologists to understand social relations and individual behavior.

### Standard program for the Sc.B. degree

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1090</td>
<td>Introductory Calculus, Part I</td>
<td>1</td>
</tr>
<tr>
<td>SOC 1100 or APMA 0650</td>
<td>Introductory Statistics for Social Research</td>
<td>1</td>
</tr>
<tr>
<td>or ECON 1620</td>
<td>Introduction to Econometrics</td>
<td></td>
</tr>
<tr>
<td>SOC 1020</td>
<td>Methods of Social Research</td>
<td>1</td>
</tr>
<tr>
<td>SOC 2010</td>
<td>Multivariate Statistical Methods I</td>
<td>1</td>
</tr>
<tr>
<td>SOC 1010</td>
<td>Classical Sociological Theory</td>
<td>1</td>
</tr>
<tr>
<td>Three (3) substantive or theory courses (non-methodological courses) in Sociology, two (2) of which must be at the 1000-level or above</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Three (3) of the following advanced analysis courses:</td>
<td></td>
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<tr>
<td>SOC 1120</td>
<td>Market and Social Surveys</td>
<td></td>
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<tr>
<td>SOC 1117</td>
<td>Focus Groups for Market and Social Research</td>
<td></td>
</tr>
<tr>
<td>SOC 1260</td>
<td>Market Research in Public and Private Sectors</td>
<td></td>
</tr>
<tr>
<td>SOC 1340</td>
<td>Principles and Methods of Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>SOC 2610</td>
<td>Spatial Thinking in Social Science</td>
<td></td>
</tr>
<tr>
<td>SOC 2960G</td>
<td>Spatial Data Analysis Techniques in the Social Sciences</td>
<td></td>
</tr>
<tr>
<td>SOC 2230</td>
<td>Techniques of Demographic Analysis</td>
<td></td>
</tr>
<tr>
<td>SOC 2210</td>
<td>Qualitative Methods</td>
<td></td>
</tr>
<tr>
<td>SOC 2020</td>
<td>Multivariate Statistical Methods II</td>
<td></td>
</tr>
<tr>
<td>SOC 2240</td>
<td>Event History Analysis</td>
<td></td>
</tr>
<tr>
<td>SOC 1970</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>SOC 1980</td>
<td>Senior Seminar</td>
<td></td>
</tr>
<tr>
<td>SOC 1990</td>
<td>Senior Thesis/Project</td>
<td></td>
</tr>
<tr>
<td>SOC 1950</td>
<td>Sociology Senior Seminar</td>
<td></td>
</tr>
<tr>
<td>Total Number of Courses (12-13)</td>
<td></td>
<td>12-13</td>
</tr>
</tbody>
</table>

### Research Internship

A one semester or a summer research internship is required. The research internship is designed to provide students with hands-on experience in social research. Students will typically complete the research internship in their junior year or during the summer between their junior and senior years. Students need to submit an Internship Proposal Form to the Undergraduate Concentration Advisor for approval prior to starting the internship. Upon completion of the internship, students are required to submit to the Undergraduate Concentration Advisor a brief summary report of their experience, which must be signed by the supervisor of the student's internship.

Academic research internships involve work on a faculty member’s research project. Activities may range from data collection, data entry, data file management, descriptive analyses, and more advanced model estimation. Students are encouraged to approach faculty about opportunities for working on their research projects. Off-campus research internships are arranged through the Sociology Department Students Affairs Coordinator or the Undergraduate Concentration Advisor. Academic and off-campus research internships will typically entail 5-10 hours of work per week and may or may not involve compensation. Students may receive academic credit for academic research internships and off-campus internships completed during the academic year if they combine the internship experience with an academic component under the direction of a faculty advisor. Students taking an internship for credit should register for an Individual Research Project (SOC 1970).

### The Senior Seminar

The concentration in Social Analysis and Research requires all concentrators to complete a thesis or project in their senior year as a capstone experience. The purpose of the thesis or project is to allow students an opportunity to apply the knowledge they acquired on a topic of their own interests. This capstone experience provides a hands-on experience through which students learn what can be done with sociological research methods. To fulfill the capstone requirement students enroll in SOC 1950- Senior Seminar during the senior year. SOC 1950 is a one credit course that students take across two successive semesters. Students receive 0.5 credit in each semester. The senior seminar is focused on finalizing a senior project or thesis and giving a presentation of the completed work. Participation in this seminar allows each cohort of concentrators to discuss diverse interests and exposes them to a wide range of applications of sociological knowledge.

The senior thesis is supervised by a faculty member who serves as the primary advisor, and one additional faculty member who serves as a reader. The primary advisor and the reader are chosen by the student and approved by the Concentration Advisor. The reader will receive a draft and a finished copy of the students thesis, which the reader will be responsible to grade. The reader may be involved in the earlier development of the thesis depending upon the arrangement made by the student with the reader. The Senior thesis will normally consist of a major research project. By the end of the sixth semester, students must submit a prospectus of the senior thesis to the Concentration Advisor. At the start of the seventh semester students should submit to the Concentration Advisor a proposal (not more than four pages) accompanied by the signature of one faculty member indicating that he or she is willing to serve as the primary advisor or the thesis. Only a senior thesis qualifies the student for Honors. A thesis typically includes one or two semesters of course credit through SOC 1980 - Senior Thesis/Project (fall semester) and/or SOC 1990 - Senior Thesis/Project (spring semester). SOC 1980 and SOC 1990 do not count toward the 12-13 course requirement for the concentration.

A senior project differs from a thesis in its scholarly content and form, and it depends only on the evaluation of the senior seminar instructor.
(although students may elect to have a faculty advisor for the project, in addition to the senior seminar instructor). Whereas the senior thesis follows the form of a conventional research paper, the project allows a wider array of research and creative outputs, including, but not limited to video documentaries, photographic exhibitions, and applied or policy related reports with an off-campus organization. Projects should be complemented by an analytical paper that situates the central subject matter of the project within the context of sociological scholarship.

You should decide your senior project in consultation with the Concentration Advisor and the instructor of the Senior Seminar. You may also need to approach a specific faculty member within the department to advise you on your project. At the beginning of your senior year you should file a written statement with the Concentration Advisor describing your senior project and listing your advisor for the project (if you opt to have one outside of the SOC 1950 instructor). Students who have a faculty advisor on their senior project may register for SOC 1980 Senior Thesis/Project (fall semester) and SOC 1990 Senior Thesis/Project (spring semester). SOC 1980 and SOC 1990 do not count toward the 12-13 course requirement for the concentration.

**Due Dates**

During the second week of March, a complete draft of the senior thesis must be given to the faculty advisor and the reader for comments, and the final version of the senior thesis is due during the second week of April (exact dates vary from year to year and are announced at the start of the academic year).

During the second week of March, a complete draft of the senior project must be given to the instructor of the senior seminar and the faculty advisor (if the student has one) for comments, and the final version of the senior project is due during the second week of April (the exact dates vary from year to year and are announced at the start of the academic year). These deadlines are essential to allow the faculty time to evaluate theses for awards, and to notify the Registrar with recommendations for honors. NO EXTENSIONS WILL BE GRANTED.

**Honors**

In order to be considered for honors, students must receive a grade point average of at least 3.5 (A=4, B-3, C=2) on all concentration courses taken, and no more than one (1) of the concentration courses with the "S/NC" option. Honors also requires a senior thesis, with a recommendation of Honors by the advisor and reader, that demonstrates an understanding of empirical research.

**Independent Study**

Students can use no more than one (1) Independent Study course (SOC 1970) to meet the concentration course requirements. This course counts towards a 1000 level substantive requirement and will not serve as a substitute for any of the core concentration requirement.

**Sociology**

Sociology seeks to understand human behavior by studying how individuals connect to the groups and institutions in which they live. Sociologists analyze the interrelationship of social structures with political, economic, and cultural forces, from the micro to the macro level. As a discipline, sociology provides students with the conceptual and analytic tools to make sense of complex social structures in a rapidly changing global environment. Brown’s Sociology department brings together a dynamic group of scholars with international reputations for outstanding achievement in a range of important research areas -- social demography, health and medicine, environmental justice and environmental change, development, politics and democracy, urban and spatial analysis, and organizations and occupations. Concentrators passionate about social challenges may also choose to pursue the Engaged Scholars Program, which allows the opportunity to connect theory and practice and gain hands-on experience working with community partners.

**Standard program for the A.B. degree**

Ten courses are required:

- Requirements: (10 course)

- One introductory level course to be selected from:
  - SOC 0010 Culture, Power and Social Change
  - SOC 0020 Perspectives on Social Interaction: An Introduction to Social Psychology
  - SOC 0130 American Heritage: Democracy, Inequality, and Public Policy
  - SOC 1010 Classical Sociological Theory
  - SOC 1020 Methods of Social Research
  - SOC 1100 Introductory Statistics for Social Research
  - (or APMA 0650 or ECON 1620 or CLPS 0900)

- Two semesters of SOC 1950 Senior Seminar (.500 credit course each semester in senior year)

- Five additional courses
  - a. At least three of the optional courses have to be 1000 level and one of them must be a substantive seminar (1870/1871).
  - b. Students can choose to take up to two (showcase) lower level (0100 level) courses.
  - c. Students can petition to take two courses outside of the discipline (this will be allowed only when the proposed course makes sense given the interests of the student, and there is no equivalent sociology course).

- Total Credits: 10

***See the Sociology website http://www.brown.edu/academics/sociology/ for detail regarding Honors and Independent Studies

**The Senior Seminar**

Sociology requires all concentrators to complete a thesis or project in their senior year as a capstone experience. The purpose of the thesis or project is to allow students an opportunity to apply the knowledge they acquired on a topic of their own interests. This capstone experience provides a hands on experience through which students learn what can be done with Sociology. To fulfill the capstone requirement students enroll in SOC 1950 – Senior Seminar during the senior year. is a one credit course that students take across two successive semesters. Students receive 0.5 credit in each semester. The senior seminar is focused on finalizing a senior project or thesis and giving a presentation of the completed work. Participation in this seminar allows each cohort of concentrators to discuss their diverse interests and expose them to the wide range of applications of Sociological knowledge.

The senior thesis is supervised by a faculty member who serves as the primary advisor, and one additional faculty member who serves as a reader. The primary advisor and the reader are chosen by the student and approved by the Concentration Advisor. The reader will receive a draft and a finished copy of the student’s thesis, which the reader will be responsible to grade. The reader may be involved in the earlier development of the thesis depending upon the arrangement made by the student with the reader. The senior thesis will normally consist of a major research paper. By the end of the sixth semester, students must submit a prospectus of the senior thesis to the Concentration Advisor. At the start of the seventh semester students should submit to the Concentration Advisor a proposal (not more than four pages) accompanied by the signature of one faculty member indicating that he or she is willing to serve as primary advisor on the thesis. Only a senior thesis qualifies the student for Honors. A thesis typically includes one or two semesters of course credit through - Senior Thesis/Project (fall semester) and/or - Senior Thesis/Project (spring semester), and do not count toward the 10 course requirement for the concentration.

A senior project differs from a thesis in its scholarly content and form, and it depends only on the evaluation of the senior seminar instructor (although students may elect to have a faculty advisor for the project, in addition to the senior seminar instructor). Whereas the senior thesis follows the form of a conventional research paper, the project allows a wider array of research and creative outputs, including but not limited to video documentaries, photographic exhibitions, and applied or policy related reports with an off-campus organization. Projects should be complemented by an analytical paper that situates the central subject matter of the project within the context of sociological scholarship.
You should decide your senior project in consultation with the Concentration Advisor and the instructor of the Senior Seminar. You may also need to approach a specific faculty member within the department to advise you on your project. At the beginning of your senior year you should file a written statement the Concentration Advisor describing your senior project (if you opt to have one outside of the instructor). Students who have a faculty advisor on their senior project may register for - Senior Thesis/Project (fall semester) and/or - Senior Thesis/Project (spring semester). SOC 1880 and SOC 1990 do not count towards the 10 course requirement for the concentration.

Due Dates
During the second week of March, a complete draft of the senior thesis must be given to the faculty advisor and the reader for comments, and the final version of the senior thesis is due during the second week of April (the exact dates vary from year to year and are announced at the start of the academic year).

During the second week of March, a complete draft of the senior project must be given to the instructor of the senior seminar and the faculty advisor (if the student has one) for comments, and the final version of the senior project is due during the second week of April (the exact dates vary from year to year and are announced at the beginning of the academic year).

These deadlines are essential to allow faculty time to evaluate theses for awards, and to notify the Registrar with recommendations for honors. NO EXCEPTIONS WILL BE GRANTED.

Honors
In order to be considered for honors, students must receive a grade point average of at least 3.5 (A=4, B=3, C=2) on all concentration courses taken, and can take no more than one (1) of the concentration courses with the "S/NC" option. Honors also requires a senior thesis, with a recommendation of Honors by the advisor and reader, that demonstrates an understanding of empirical research.

Independent Study
Students can use no more than one (1) Independent Study course to meet the concentration course requirements. This course counts only towards a 1000 level substantive requirement and will not serve as a substitute for any of the core concentration requirements.

South Asian Studies

The diversity and shared histories of South Asia's cultures, religions, languages, and nations are an important area of engagement in the world today. While India, Pakistan, Bangladesh, Sri Lanka, Nepal and neighboring nation-states constitute a recognizable geographic region, the equally vital diasporic communities from South Asia and their globally dispersed networks extend our understanding of an old and yet changing South Asia. South Asian Studies is an interdisciplinary concentration in which students work in a specified chronological period (e.g. ancient, medieval, early modern, or contemporary), in a geographical area (e.g. Bangladesh, Bengal, Maharashtra, North India, Pakistan, South India), or in a particular discipline (e.g. anthropology, Hindi/Urdu, history, religion, or Sanskrit) but also take courses outside of their chosen area of emphasis in disciplines such as economics, literature, philosophy, political science, or theatre arts.

Course Requirements

All South Asian Studies concentrators must take and pass 10 courses as approved by their concentration advisor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST1620</td>
<td>Gandhi's India: South Asia Before 1947</td>
<td>1</td>
</tr>
<tr>
<td>CLAS 0180</td>
<td>Indian Civilization through Its Literature</td>
<td>1</td>
</tr>
<tr>
<td>CLAS 0800</td>
<td>Religious and Philosophical Thought in Ancient India</td>
<td></td>
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<tr>
<td>CLAS 0820</td>
<td>Epics of India</td>
<td></td>
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<tr>
<td>CLAS 0990</td>
<td>Concepts of the Self in Classical Indian Literature</td>
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<tr>
<td>CLAS 1140</td>
<td>Classical Philosophy of India</td>
<td></td>
</tr>
<tr>
<td>RELS 0140</td>
<td>Religions of South Asia</td>
<td></td>
</tr>
<tr>
<td>RELS 0130</td>
<td>Religions of Classical India</td>
<td></td>
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<tr>
<td>ANTH 1250</td>
<td>Film and Anthropology: Identity and Images of Indian Societies</td>
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<tr>
<td>ANTH 1321</td>
<td>Impact on Colonialism: Gender and Nationalism in India</td>
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<tr>
<td>ANTH 1131</td>
<td>Indian Issues in Anthropological Perspective</td>
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<tr>
<td>ANTH 2321</td>
<td>Coming to Terms with India: Anthropology of Colonialism and Nationalism</td>
<td></td>
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<tr>
<td>POLS 1280</td>
<td>Politics, Economy and Society in India</td>
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<tr>
<td>MUSC 0041</td>
<td>World Music Cultures (Middle East and Asia)</td>
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<tr>
<td>HIAA 1410A</td>
<td>Topics in Islamic Art: Islamic Art and Architecture on the Indian Subcontinent</td>
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<tr>
<td>HNDI 1080</td>
<td>Advanced Hindi-Urdu</td>
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<tr>
<td>PRSN 1200</td>
<td>Islamic Revolution</td>
<td></td>
</tr>
<tr>
<td>RELS 0910</td>
<td>Music, Drama and Religion in India</td>
<td></td>
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<tr>
<td>TAPS 1270</td>
<td>Masking, Trancing, Performing, and Spectating in Non-Western and Circumpacific Performance</td>
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</tbody>
</table>

An Honors Thesis or a Capstone Course taken in an appropriate Department.

Five electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ANTH 0066K</td>
<td>International Perspectives of Women's Agency and Society</td>
</tr>
<tr>
<td>ANTH 1131</td>
<td>Indian Issues in Anthropological Perspective</td>
</tr>
<tr>
<td>ANTH 1220</td>
<td>Comparative Sex Roles</td>
</tr>
<tr>
<td>ANTH 1250</td>
<td>Film and Anthropology: Identity and Images of Indian Societies</td>
</tr>
<tr>
<td>ANTH 2320</td>
<td>Ideology of Development</td>
</tr>
<tr>
<td>ANTH 2321</td>
<td>Coming to Terms with India: Anthropology of Colonialism and Nationalism</td>
</tr>
<tr>
<td>CLAS 0180</td>
<td>Indian Civilization through Its Literature</td>
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<td>CLAS 0990</td>
<td>Concepts of the Self in Classical Indian Literature</td>
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<tr>
<td>CLAS 1140</td>
<td>Classical Philosophy of India</td>
</tr>
<tr>
<td>ECON 1520</td>
<td>The Economic Analysis of Institutions</td>
</tr>
<tr>
<td>HIAA 1410A</td>
<td>Topics in Islamic Art: Islamic Art and Architecture on the Indian Subcontinent</td>
</tr>
<tr>
<td>HIST 2971A</td>
<td>Science in a Colonial Context</td>
</tr>
<tr>
<td>HNDI 0100</td>
<td>Beginning Hindi or Urdu</td>
</tr>
<tr>
<td>HNDI 0200</td>
<td>Beginning Hindi or Urdu</td>
</tr>
<tr>
<td>HNDI 0300</td>
<td>Intermediate Hindi-Urdu</td>
</tr>
<tr>
<td>HNDI 0400</td>
<td>Intermediate Hindi-Urdu</td>
</tr>
<tr>
<td>HNDI 1080</td>
<td>Advanced Hindi-Urdu</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Language Requirements

Proficiency in a South Asian language is required for the concentration. Students who are not native speakers of a South Asian language may prove proficiency by taking two years of Hindi/Urdu or Sanskrit at Brown, by successfully passing a course at the intermediate (4th semester) level at Brown or the approved equivalent at another institution, or by successfully passing a special examination administered by an approved faculty member. Two courses taken to fulfill the language requirement may be counted among the elective courses required for concentration.

Study Abroad

All South Asian Studies concentrators are encouraged to take Hindi/Urdu and to participate in Brown in India, a junior-year study abroad program at St. Stephen’s College and Lady Sri Ram College in Delhi. Students can also opt to enroll in any other Brown approved study-abroad program in South Asia.

Capstone Project

All concentrators other than honors concentrators will designate an upper-level course in the area of their primary focus as their capstone course. The student will take this course during the senior year and will produce as part of the written work for the course a substantial paper or annotated translation displaying the unique focus of his or her concentration.

Honors

A South Asian Studies Concentration with Honors requires a high B or A average in courses taken for the concentration as well as an honors thesis in the department of the student’s main focus. Candidates for the honors program should apply to the South Asia Faculty Group through their advisor by the middle of their sixth semester.

Statistics

The Concentration is based on several premises: that statistics is a scientific discipline in its own right, with specialized methodologies and body of knowledge; that it is essentially concerned with the art and science of data analysis; and that it is best taught in conjunction with specific, substantive applications. To this end, the Concentration is designed to provide foundations that include basic statistical concepts and methodologies, and to expose students to the role of statistical thinking and analysis in interdisciplinary research and in the public sphere. The Concentration prepares students for careers in industry and government, for graduate study in statistics or biostatistics and other sciences, as well as for professional study in law, medicine, business, or public administration. The undergraduate concentration guide is available here (https://www.brown.edu/academics/public-health/biostatistics/undergraduate-statistics-concentration).

The Undergraduate Concentration in Statistics is administered by the Department of Biostatistics and leads to a Sc.B. degree. To ensure deep rigorous understanding of the foundations and main methods of analysis in statistics, the program is composed of three parts. The first part entails foundations in mathematics and computing, combined with an introduction to statistical thinking and practice. The second part includes four core courses that provide a comprehensive account of the fundamentals of statistical theory and data analysis. The third part delves into more advanced material covering important areas of statistical methodology. In addition to the formal coursework, students are required to complete a capstone project that involves a substantial data analysis or a methodological/theoretical project. Students also have opportunities to acquire practical experience in study design, data management, and statistical analysis by working as undergraduate research assistants in projects in one of the participating academic Departments or Research Centers at Brown.

The program requires thirteen one-semester courses. The required courses are as follows:

**LEVEL I: Foundations in Mathematics - Calculus**
- MATH 0100 Introductory Calculus, Part II
- MATH 0180 Intermediate Calculus

**LEVEL I - Foundations in Mathematics - Linear Algebra**
- MATH 0520 Linear Algebra

**Computing**
- APMA 0160 Introduction to Scientific Computing
or CSCI 0040 Introduction to Scientific Computing and Problem Solving

**Introduction to Statistical Thinking and Practice** 1
PHP 1501 Essentials of Data Analysis

With the approval of the Director of the Statistics Concentration, one of the following courses may serve as replacement:
- SOC 1100 Introductory Statistics for Social Research
- ECON 1620 Introduction to Econometrics
- APMA 0650 Essential Statistics
- BIOL 0495 Statistical Analysis of Biological Data
- EDUC 1110 Introductory Statistics for Education Research and Policy Analysis
- CLPS 0900 Statistical Methods

**LEVEL II - Core Courses in Theory and Data Analysis** 2

APMA 1650 Statistical Inference I
APMA 1660 Statistical Inference II

OR
MATH 1610 Probability
MATH 1620 Mathematical Statistics

**Introduction to Biostatistics** 1

PHP 1510 Principles of Biostatistics and Data Analysis

OR
PHP 2510 Principles of Biostatistics and Data Analysis

**LEVEL III: Advanced Courses in Statistical Methods** 2

PHP 1560 Statistical Computing I
OR
PHP 2560 Statistical Computing I

AND

PHP 2511 Applied Regression Analysis
OR
PHP 2511 Applied Regression Analysis

**Capstone Project**

PHP 1970 Independent Study

**Electives in Social Science and Biostatistics (Students must choose 2)**

SOC 1120 Market and Social Surveys
SOC 1340 Principles and Methods of Geographic Information Systems
SOC 2230 Techniques of Demographic Analysis
CSCI 1420 Machine Learning
CSCI 1810 Computational Molecular Biology
CSCI 1820 Algorithmic Foundations of Computational Biology
CSCI 1951A Data Science
PHP 0850 Fundamentals of Epidemiology
PHP 2030 Clinical Trials Methodology
PHP 2120 Introduction to Methods in Epidemiologic Research
PHP 2200 Intermediate Methods in Epidemiologic Research
PHP 2515 Fundamentals of Probability and Statistical Inference
PHP 2520 Statistical Inference I
PHP 2530 Bayesian Statistical Methods
PHP 2550 Practical Data Analysis
PHP 2580 Statistical Inference II
PHP 2602 Analysis of Lifetime Data
PHP 2601 Linear Models

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).

**Theatre Arts and Performance Studies**

The Department of Theatre Arts and Performance Studies (TAPS) is the intellectual and artistic center for the aesthetic, historical, literary, practical, and theoretical explorations of performance in global perspective – theatre, dance, speech, time-based art, and even performative “roles” in everyday life. The TAPS concentration offers three tracks with many points of overlap among them: Performance Studies, Theatre Arts, and Writing for Performance. Concentrators gain exposure to a broad spectrum of performance modes and methods – acting, directing, dance, and writing, and chose an avenue of focus among them. In addition,
TAPS concentrators with an interest in socially engaged performance that tackles complex social issues may pursue the Engaged Scholars Program (https://www.brown.edu/academics/theatre-arts-performance-studies/undergraduate-program/engaged-scholars-program). Everyone graduates having studied craft, gained familiarity with history, and investigated the role of performance arts in culture.

**Theatre Arts Track**

This concentration combines the study of dramatic literature, theatre history, performance theory, and studio work in the various theatre arts. All concentrators in Theatre Arts will gain practical experience through the study of acting and directing as well as in the technical production of plays, preparing students in the practical study of a cross-section of the vital aspects of theatre craft, including one class in either dance or speech. An essential aim of the concentration track is the engagement of students in performance procedures (acting, dancing, directing, choreography, design, playwriting, dramaturgy, etc.) in order to experience the inter-relationships among social contexts, dramatic texts and theatrical enactments. Along with practical study in craft, concentrators will graduate having studied theatre history and performance theory in global perspective, including at least one course that exhibits geographic or topical breadth beyond what might loosely be called “mainstream” Euro-American tradition. The study of theatre history provides a Theatre Arts concentrator with the necessary background to understand a variety of dramatic and theatrical forms. The study of performance theory enhances a student’s ability to ask fundamental questions about the role of theatre in social, political, cultural and cross-cultural arenas.

Students wishing to enroll as concentrators in Theatre Arts and Performance Studies and take the Theatre Arts track should see the undergraduate Theatre Arts track advisor, in order to discuss options that will best serve their interests.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPS 0230</td>
<td>Acting</td>
<td>1</td>
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<tr>
<td>TAPS 0250</td>
<td>Introduction to Technical Theatre and Production</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1230</td>
<td>Global Theatre and Performance: Paleolithic to the Threshold of Modernity</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1240</td>
<td>Performance Historiography and Theatre History</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1250</td>
<td>Twentieth-Century Western Theatre and Performance</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one of the following:

- TAPS 0220 Persuasive Communication
- Any dance history or practice course.
- Any design or theatre production course.
- Any playwriting course.

One elective to be selected from applied design, performance, or writing areas. This class must be approved by the concentration advisor.

Two electives to be selected from relevant theoretical and text-based studies in or cross-listed with the Department of Theatre Arts and Performance Studies, at least one of which must show geographical breadth. For example:

<table>
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<tbody>
<tr>
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<tr>
<td>TAPS 1250</td>
<td>Twentieth-Century Western Theatre and Performance</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1270</td>
<td>Masking, Trancing, Performing, and Spectating in Non-Western and Circumpacific Performance</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1281O</td>
<td>Acting Outside the Box: Race, Class, Gender and Sexuality in Performance</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1280N</td>
<td>New Theories for a Baroque Stage</td>
<td>1</td>
</tr>
</tbody>
</table>

### Performance Studies Track

The Performance Studies track in the Theatre Arts and Performance Studies concentration offers a base for students interested in a variety of performance forms, performance media, or in intermedial art. A concentrator in this track will study the multiple modes in which live performance articulates culture, negotiates difference, constructs identity, and transmits collective historical traditions and memories. Because Performance Studies is not primarily invested in one performance mode over another (such as theatre or dance), a concentrator will gain exposure to a broad spectrum of performance modes. Studying ritual, play, game, festival, spectacle and a broad spectrum of “performance behaviors” under the umbrella of Performance Studies, a concentrator will graduate having investigated the role of performance in culture, including performative acts in everyday life, political enactment, ritual behavior, aesthetic or representational practices, and social role or the performance of subjectivity. The history of aesthetic performance practices (such as the histories of theatre and/or dance) will be an important part of this track, serving to ground inquiry into the broader spectrum of performance study. Students will craft their electives on this track from a wide selection of courses both within the Department of Theatre Arts and Performance Studies and across the university. The study of performance behavior across mediums such as dance, theatre, ritual, and orature allows for geographic and historical flexibility as not all cultures parse theatre from dance, nor, historically, genres of religious or political ritual from genres of entertainment, play, or game. At least one of the ten required classes must show geographic or cultural breadth, and be approved as such by the undergraduate concentration advisor. Participation in practical classes in modes of performance is also required.

Students wishing to enroll as concentrators in Theatre Arts and Performance Studies and take the Performance Studies track should see the undergraduate Performance Studies track advisor, in order to discuss options that will best serve their interests.

### Required Courses

Two of the following three courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>TAPS 1230</td>
<td>Global Theatre and Performance: Paleolithic to the Threshold of Modernity</td>
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<tr>
<td>TAPS 1240</td>
<td>Performance Historiography and Theatre History</td>
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<tr>
<td>TAPS 1250</td>
<td>Twentieth-Century Western Theatre and Performance</td>
<td>1</td>
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</table>

Select three of the following (one of which must show geographical breadth) in consultation with the advisor.

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>TAPS 1230</td>
<td>Global Theatre and Performance: Paleolithic to the Threshold of Modernity</td>
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</tr>
<tr>
<td>TAPS 1240</td>
<td>Performance Historiography and Theatre History</td>
<td>1</td>
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</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
Writing for Performance Track

Concentrators explore the craft and sensibility of writing for live performance in the broad context of art in a changing society. Moving through a graduated series of skill-based writing classes, students additionally encounter theatre history in core courses and focused seminars, engage with the practical aspects of production, and relate theatre to other disciplines. Writing is viewed neither as an alienated practice nor a terminal outpost, but as a co-equal aspect of a creative ecology, sharing space with orature, scenography, ethics, and all fields that focus attention, invoke fascination, and alert the will to the possibilities of transformation.

Students wishing to enroll as concentrators in Theatre Arts and Performance Studies on the Writing for Performance track should see the undergraduate Writing for Performance track advisor in order to discuss options that will best serve their interests.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>TAPS 1250</td>
<td>Twentieth-Century Western Theatre and Performance</td>
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</tr>
<tr>
<td>TAPS 1270</td>
<td>Masking, Trancing, Performing, and Spectating in Non-Western and Circum-Pacific Performance</td>
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</tr>
<tr>
<td>TAPS 1280N</td>
<td>New Theories for a Baroque Stage</td>
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<tr>
<td>TAPS 1281O</td>
<td>Acting Outside the Box: Race, Class, Gender and Sexuality in Performance</td>
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</tr>
<tr>
<td>TAPS 1330</td>
<td>Dance History: The 20th Century</td>
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<tr>
<td>TAPS 1380</td>
<td>Mise en Scene</td>
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<tr>
<td>TAPS 1390</td>
<td>Contemporary Mande Performance</td>
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<tr>
<td>TAPS 1430</td>
<td>Russian Theatre and Drama</td>
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<tr>
<td>TAPS 1610</td>
<td>Political Theatre of the Americas</td>
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<tr>
<td>TAPS 1630</td>
<td>Performativity and the Body: Staging Gender, Staging Race</td>
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<tr>
<td>TAPS 1650</td>
<td>21st Century American Drama</td>
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<td>TAPS 1670</td>
<td>Latino/a Theatre and Performance</td>
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<tr>
<td>TAPS 1690</td>
<td>Performance, Art, and Everyday Life</td>
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<tr>
<td>TAPS 2120</td>
<td>Revolution as a Work of Art</td>
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<td>AFRI 0990</td>
<td>Black Lavender: Black Gay/Lesbian Plays/ Dramatic Constructions in the American Theatre</td>
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<td>AFRI 1110</td>
<td>Voices Beneath the Veil</td>
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<td>AFRI 1070</td>
<td>RPM: Traditional and Contemporary Elements of Intertribal Indigenous Theater in America</td>
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<td>AFRI 1120</td>
<td>African American Folk Traditions and Cultural Expression</td>
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<td>ANTH 1212</td>
<td>The Anthropology of Play</td>
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<td>CLAS 1930C</td>
<td>Parasites and Hypocracies</td>
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<td>MCM 1502J</td>
<td>Race as Archive</td>
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<tr>
<td>MCM 1503W</td>
<td>Getting Emotional: Passionate Theories (ENGL 1560W)</td>
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<tr>
<td>MUSC 0040</td>
<td>World Music Cultures (Africa, America, Europe, Oceania)</td>
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<td>RELS 0910</td>
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<tr>
<td>RELS 1610</td>
<td>Sacrifice and Society</td>
<td></td>
</tr>
<tr>
<td>TAPS 1520</td>
<td>Seminar in Theatre Arts</td>
<td></td>
</tr>
<tr>
<td>TAPS 1500L</td>
<td>Screenwriting</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1500I</td>
<td>Screenwriting</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1500J</td>
<td>Script Adaptation</td>
<td>1</td>
</tr>
</tbody>
</table>

Two full credit courses based in performance craft in either Acting, Directing, Speech, Dance, Design, Literary Arts (with a performance emphasis), Visual Arts, or Music. These classes must be approved by the concentration advisor.

Two additional courses in the academic study of performance and performance culture(s) to be culled from those listed above as well as other courses in the Department of Theatre Arts and Performance Studies or throughout the university in consultation with advisor. For example:

AFRI 1070 RPM: Traditional and Contemporary Elements of Intertribal Indigenous Theater in America
AFRI 1120 African American Folk Traditions and Cultural Expression
ANTH 1212 The Anthropology of Play
CLAS 1930C Parasites and Hypocracies
MCM 1502J Race as Archive
MCM 1503W Getting Emotional: Passionate Theories (ENGL 1560W)
MUSC 0040 World Music Cultures (Africa, America, Europe, Oceania)
RELS 0910 Music, Drama and Religion in India
RELS 1610 Sacrifice and Society
TAPS 1520 Seminar in Theatre Arts

Total Credits: 10

Writing for Performance Track

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPS 0100</td>
<td>Playwriting I (or other equivalent introductory level Playwriting course, to be approved by the advisor)</td>
<td>1</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAPS 1210</td>
<td>Solo Performance</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1280S</td>
<td>Libretto Workshop for Musical Theatre</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1500I</td>
<td>Screenwriting</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1500J</td>
<td>Script Adaptation</td>
<td>1</td>
</tr>
<tr>
<td>LITR 0110A</td>
<td>Fiction I</td>
<td>1</td>
</tr>
<tr>
<td>LITR 0110B</td>
<td>Poetry I</td>
<td>1</td>
</tr>
<tr>
<td>LITR 0210A</td>
<td>Fiction Writing II</td>
<td>1</td>
</tr>
<tr>
<td>LITR 0210B</td>
<td>Poetry Writing II</td>
<td>1</td>
</tr>
<tr>
<td>LITR 1150E</td>
<td>Strange Attractors: Adaptations/Translations</td>
<td>1</td>
</tr>
<tr>
<td>LITR 1150M</td>
<td>Short Fiction Experiments</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1500L</td>
<td>Acting Together on the World Stage: Writing and Political Performance</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 0250</td>
<td>Introduction to Technical Theatre and Production</td>
<td>1</td>
</tr>
</tbody>
</table>

Two of the following three courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPS 1230</td>
<td>Global Theatre and Performance: Paleolithic to the Threshold of Modernity</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1240</td>
<td>Performance Historiography and Theatre History</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1250</td>
<td>Twentieth-Century Western Theatre and Performance</td>
<td>1</td>
</tr>
</tbody>
</table>

One performance-based class. Options include Acting, Directing, Speech, Dance, Visual Arts, Music, or Sign Language.

Select two additional Theatre/Performance History/Theory classes in or cross-listed with the Department of Theatre Arts and Performance Studies. For example:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPS 1230</td>
<td>Global Theatre and Performance: Paleolithic to the Threshold of Modernity</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1240</td>
<td>Performance Historiography and Theatre History</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1250</td>
<td>Twentieth-Century Western Theatre and Performance</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1270</td>
<td>Masking, Trancing, Performing, and Spectating in Non-Western and Circum-Pacific Performance</td>
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</tr>
<tr>
<td>TAPS 1280N</td>
<td>New Theories for a Baroque Stage</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1330</td>
<td>Dance History: The 20th Century</td>
<td>1</td>
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<tr>
<td>TAPS 1380</td>
<td>Mise en Scene</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1390</td>
<td>Contemporary Mande Performance</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1430</td>
<td>Russian Theatre and Drama</td>
<td>1</td>
</tr>
<tr>
<td>TAPS 1610</td>
<td>Political Theatre of the Americas</td>
<td>1</td>
</tr>
</tbody>
</table>

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
For **all concentrators, regardless of track:**

In cases where dual concentrations are declared, the Department allows two courses to be counted toward both concentrations.

### Capstone

The Capstone is a culminating project/experience designed by the student that fulfills the concentration track. TAPS capstones can take a variety of forms, such as a solo performance or dance piece, the writing of a play, an honor’s thesis or a design project, or directing a production. Students begin working on their capstone in the required senior seminar course, which is offered in the fall term. Capstone projects may be completed in either the fall with the termination of the Seminar, or in the subsequent spring term.

### Honors

The standard pattern above, plus an honors thesis course taken in Semester VII (TAPS 1990), the topic of which would be determined before Semester VII. Candidates for the honors program should have an outstanding academic record and must apply to the Department by April 1 of Semester VI. Proposals can be submitted electronically. Honors are awarded for theses in all concentration tracks. All theses are substantive pieces of writing. Some these are strictly academic. Other honors theses may include a creative component (such as the directing of a play, a solo performance piece, the study and performance of a major role, or the design of a production) but the thesis itself will be a critical, written work based in research relative to that artwork. For plays submitted for honors, the essay should accompany the play, reporting on the research and the process of writing, though the play itself counts as the substantive written work. See the Honors Advisor for more information about proposal and thesis guidelines.

### Urban Studies

The Urban Studies program teaches students to analyze the city, urban life, and urbanization through a variety of disciplinary lenses. Students learn where cities come from, how they grow, thrive, and decline, how they are organized, and how to construct meaningful, inclusive, secure, and sustainable places. The curriculum examines how urban problems arise, how they have been previously addressed, and how to plan cities of the future. Concentrators enjoy the breadth of courses in American Studies, economics, history, literature, history of art and architecture, political science, sociology, and planning as well as provide in-depth courses integrating those perspectives. We introduce the fundamentals of Urban Studies scholarship as well as intense examination of an urban problem in focused seminars. These advanced seminars offer opportunities to write extensive and synthetic interdisciplinary analyses that serve as capstones to the concentration. The program’s 10-course curriculum provides sufficient flexibility to allow students to pursue specific urban interests or to take courses in urban focus areas of Built Environment; Humanities; Social Sciences; and Sustainable Urbanism. The Program insures that students master at least one basic research methodology and perform research or fieldwork projects, which may result in an honors thesis. Fieldwork training includes working with local agencies and nonprofit organizations on practical urban problems. Capstone projects entail original research papers in Urban Studies seminars; academically supervised video, artistic, or community service projects; and Honors Theses for eligible concentrators.

Concentrators who are especially interested in making deeper connections between their curriculum and long-term engaged activities such as internships, public service, humanitarian and development work, and many other possible forms of community involvement might consider the Engaged Scholar Program (https://www.brown.edu/academics/urban-studies/curriculum/engaged-scholars-program) in US. The program combines preparation, experience, and reflection to offer students opportunities to enhance the integration of academic learning and social engagement.

For a concentration, the program requires ten courses selected from four course groups:

**Introduction (choose one):**

- PLCY 0022 City Politics
- URBN 0210 The City: An Introduction to Urban Studies
- URB 0230 Urban Life in Providence: An Introduction

**Research Methods (choose one):**

- APMA 0650 Essential Statistics
- APMA 1650 Statistical Inference I
- APMA 1660 Statistical Inference II
- CLPS 0900 Statistical Methods
- ECON 1620 Introduction to Econometrics
- EDUC 1110 Introductory Statistics for Education Research and Policy Analysis
- PHP 1501 Essentials of Data Analysis
- POLS 1600 Political Research Methods
- SOC 1020 Methods of Social Research
- SOC 1100 Introductory Statistics for Social Research
- URB 1500 Understanding the City through Data

**Core Courses (3 courses required, in at least 3 disciplines, such as American studies, anthropology, economics, education, English, history, history of art and architecture, political science, and sociology, as well as urban planning when staffing allows):**

- AMST 1612D Cities of Sound: Place and History in American Pop Music
- ANTH 1236 Urban Life: Anthropology in and of the City
- ANTH 1255 Anthropology of Disasters
- ECON 1410 Urban Economics
- ENGL 0100N City Novels
- ENGL 1760K Reading New York
- ENVS 1400 Sustainable Design in the Built Environment
- ENVS 1580 Environmental Stewardship and Resilience in Urban Systems
- GEOL 1320 Introduction to Geographic Information Systems for Environmental Applications
- HIAA 0074 Nineteenth-Century Architecture
- HIAA 0770 Architecture and Urbanism of the African Diaspora
- HIAA 0840 History of Rhode Island Architecture
- HIAA 0850 Modern Architecture
- HIAA 0860 Contemporary Architecture
- HIAA 0861 City and Cinema
- HIAA 1103 Introduction to Architectural Design
- HIAA 1850D Film Architecture
- HIST 1550 American Urban History, 1600-1870
- HIST 1551 American Urban History, 1870-1965 (HIST 1550::American Urban History to 1870)
- POLS 1310 African American Politics

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For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).
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Off-Campus Courses: Some courses taken outside Brown (e.g., in study abroad programs) may be used for credit towards the concentration if the material covered directly corresponds to that taught in Brown courses, or is relevant to the complementary curriculum. Such courses will be approved each semester by the concentration advisor.

Honors

Candidates for Honors must have above average grades and shall apply for this distinction in writing to the Director of the Program by the middle of the second semester of their junior year. They shall include a cover letter with a brief statement of the intended research proposal as well as the name of the member of the Urban Studies faculty who would serve as their advisor and with whom they must work closely. Twelve courses are required for Honors concentrator, two in addition to the ten courses required for a standard program. During the Fall and Spring of the senior year, honors candidates must complete two additional courses beyond the ten courses required by the regular concentration: URBN 1971 Senior Honors Thesis I in Urban Studies (S/NC) and URBN 1972 Senior Honors Thesis II in Urban Studies (grade). The candidate's final thesis must be of outstanding quality, in order to qualify for honors.

Visual Art

The Visual Art concentration engages in artistic practice across a wide range of media: painting, sculpture, printmaking, drawing, photography, and digital imaging. Courses in art history combine with these to frame the direction of the concentrator's work and to develop his or her critical thinking skills. Students are encouraged to cultivate an informed and thoughtful individual perspective. Students in the Visual Arts department enjoy cutting-edge facilities and a knowledgeable faculty. These two resources inspire creativity and pleasure in our concentrators while they explore the discipline. Students acquire the intellectual and practical tools to make art as well as to interpret and critique the world of images. Students also have the opportunity to take courses at the neighboring Rhode Island School of Design. All Visual Art (VISA) courses are graded S/N/C (https://www.brown.edu/academics/college/degree/policies/grade-options).

Concentration Program Requirements

<table>
<thead>
<tr>
<th>Concentration Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISA 0100 Studio Foundation (Prerequisite for all upper-level studio courses)</td>
<td>1</td>
</tr>
<tr>
<td>2 of the following 4 discipline-based foundation courses are required.</td>
<td>2</td>
</tr>
<tr>
<td>VISA 0120 Foundation Media: Sound and Image (This course is a prerequisite for upper-level Media courses such as New Genre and Video Art)</td>
<td>5</td>
</tr>
<tr>
<td>VISA 0130 3-D Foundation</td>
<td></td>
</tr>
<tr>
<td>VISA 0140 Photography Foundation</td>
<td></td>
</tr>
<tr>
<td>VISA 0150 Digital 2D Foundation</td>
<td></td>
</tr>
<tr>
<td>5 additional studio courses are required. A minimum of three elective studio courses must be taken in the Brown Visual Art Department</td>
<td></td>
</tr>
<tr>
<td>3 HIAA courses are required:</td>
<td></td>
</tr>
<tr>
<td>HIAA 0010 A Global History of Art and Architecture such as those listed below</td>
<td>1</td>
</tr>
<tr>
<td>1 course covering Modern or Contemporary Art History such as</td>
<td>1</td>
</tr>
<tr>
<td>HIAA 0801 Art After '68</td>
<td></td>
</tr>
<tr>
<td>or HIAA 0810 20th Century Sculpture</td>
<td></td>
</tr>
<tr>
<td>or HIAA 0870 20th Century British Art: Edwardian to Contemporary</td>
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</tr>
<tr>
<td>One additional History of Art and Architecture course.</td>
<td>1</td>
</tr>
<tr>
<td>Senior Thesis Exhibition: which does not carry academic credit, is required for graduation (usually presented during the seventh or eighth semester).</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>11</td>
</tr>
</tbody>
</table>

Honors

The project is a two-semester enterprise and counts as two courses taken for graduation credit VISA 1800C (Sem I) and VISA 1990 (Sem II) but will not count as two of the eleven courses needed for the visual art concentration. Students that are planning to complete their degree requirements in December must apply for honors by December 5 of the previous year.

For up-to-date course information please visit Courses@Brown.edu (https://cab.brown.edu).